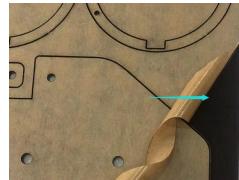


# Stray Snail Installation steps

**Note:** Check out the main tutorial to learn about Arduino before installing it.

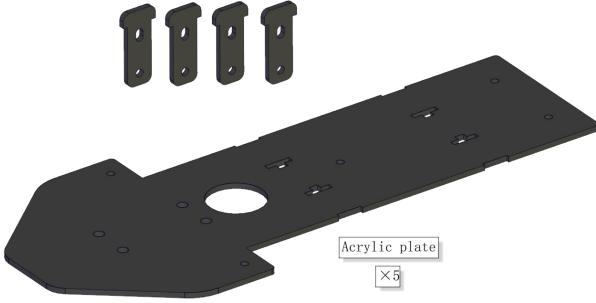
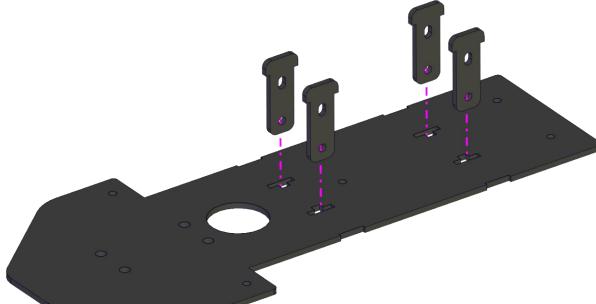
Because installation requires uploading the code that controls the steering gear.

**Note:** First remove the protective film of the acrylic sheet. As shown below

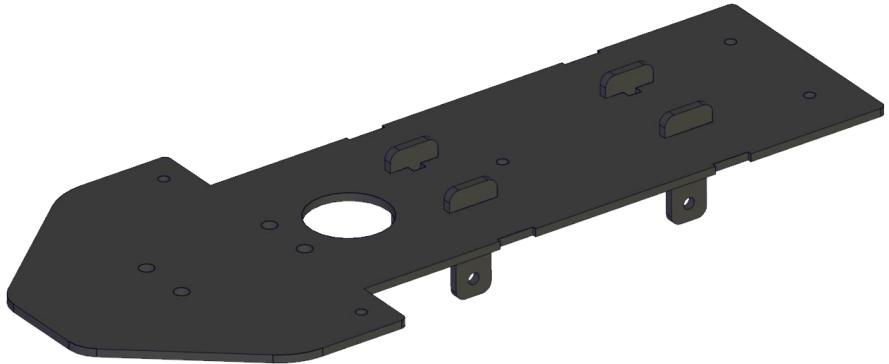


Acrylic plate is more brittle, installation needs to be careful and patient

## Installation 1

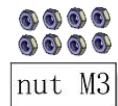
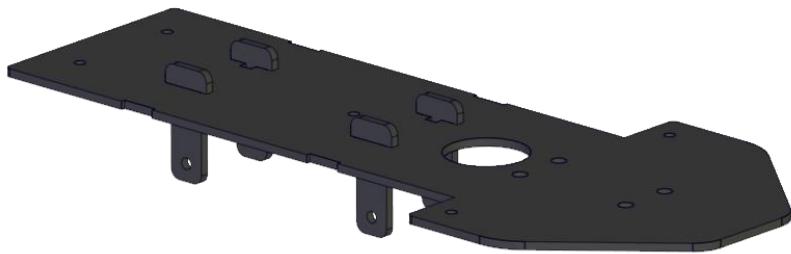
Parts required for installation	
install	

complete

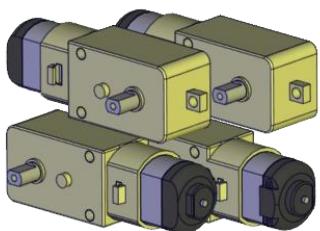


## Installation 2

Parts  
required  
for  
installati  
on



$\times 8$



motor  
 $\times 4$



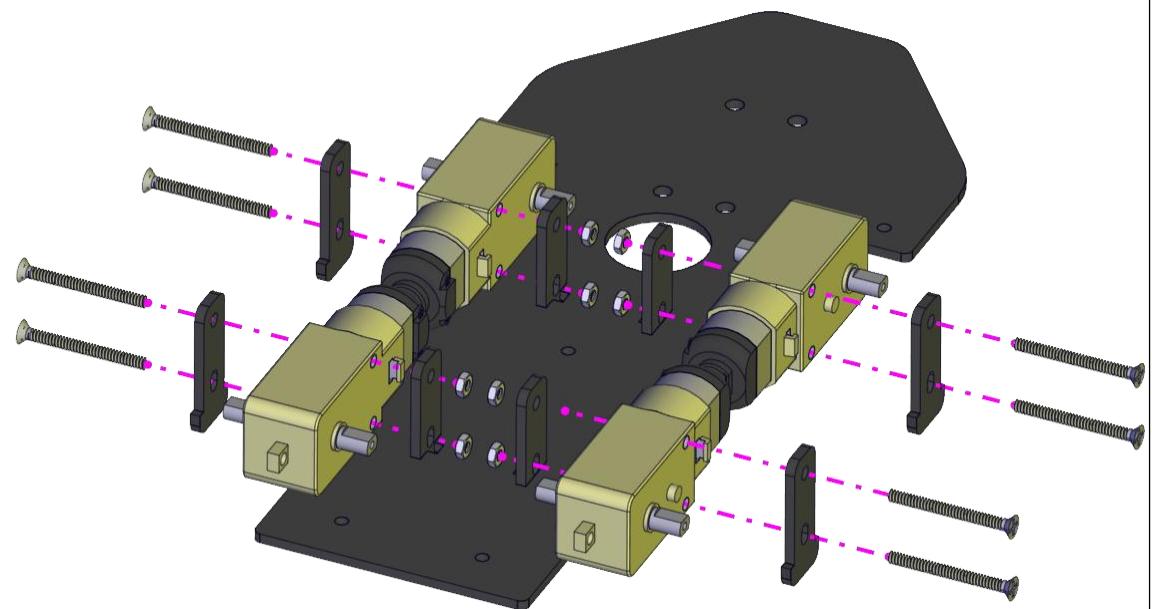
Acrylic ba  
 $\times 4$



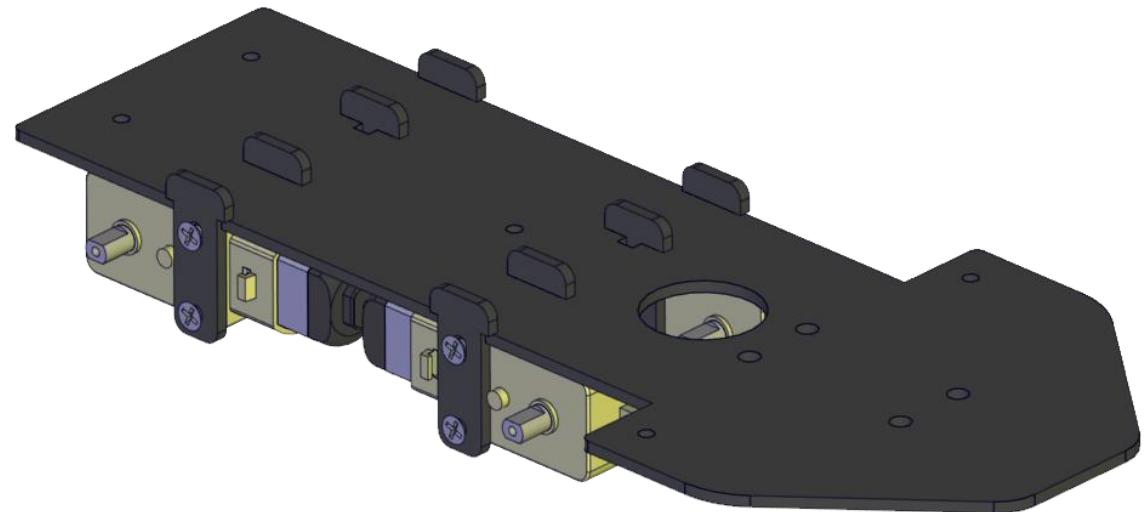
flat head screw M3\*30  
 $\times 8$

## Install

(Note  
that the  
wire of  
the motor  
faces  
inward)

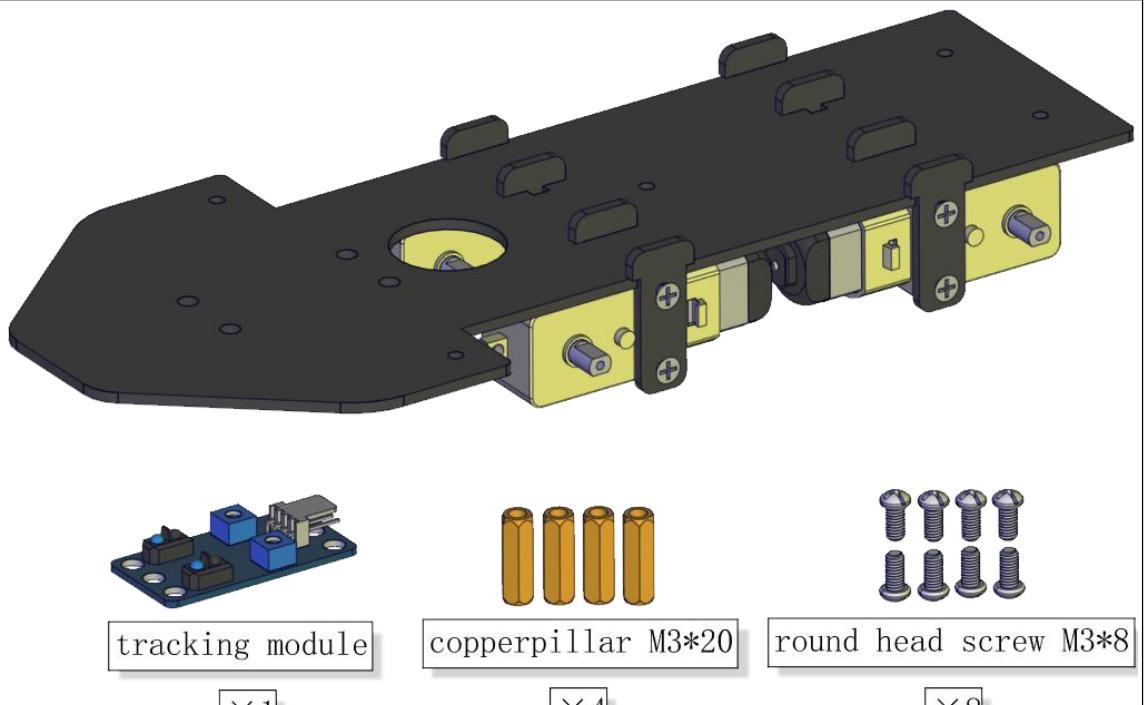


complete

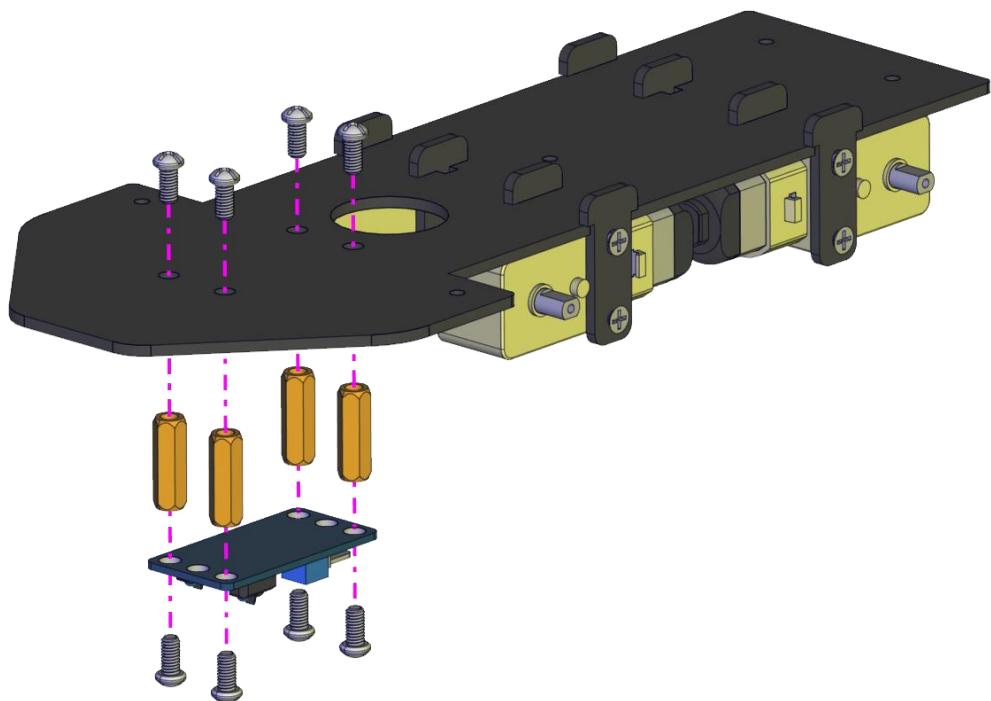


## Installation 3

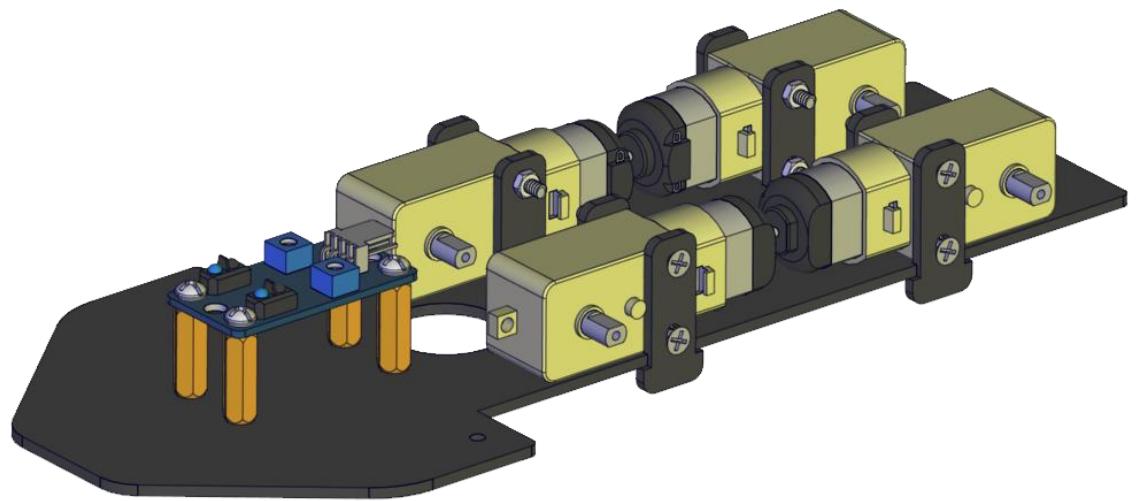
Parts  
required  
for  
installati  
on



install

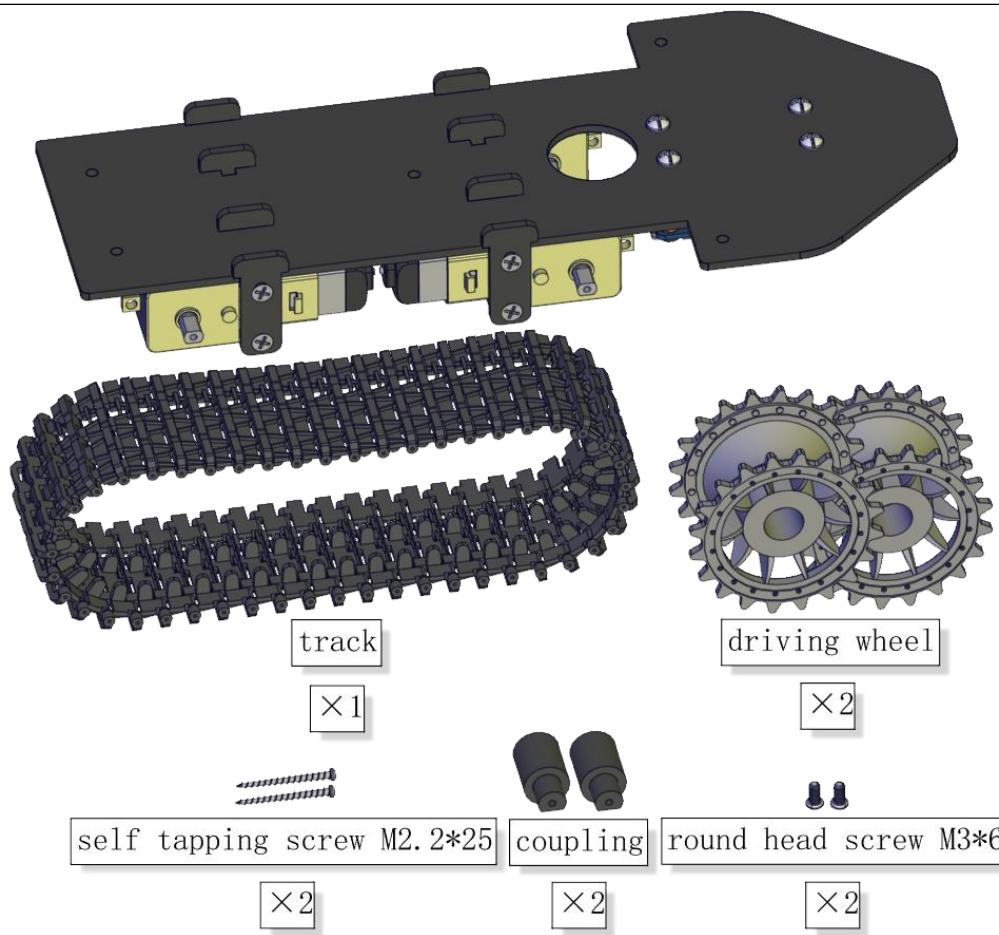


complete



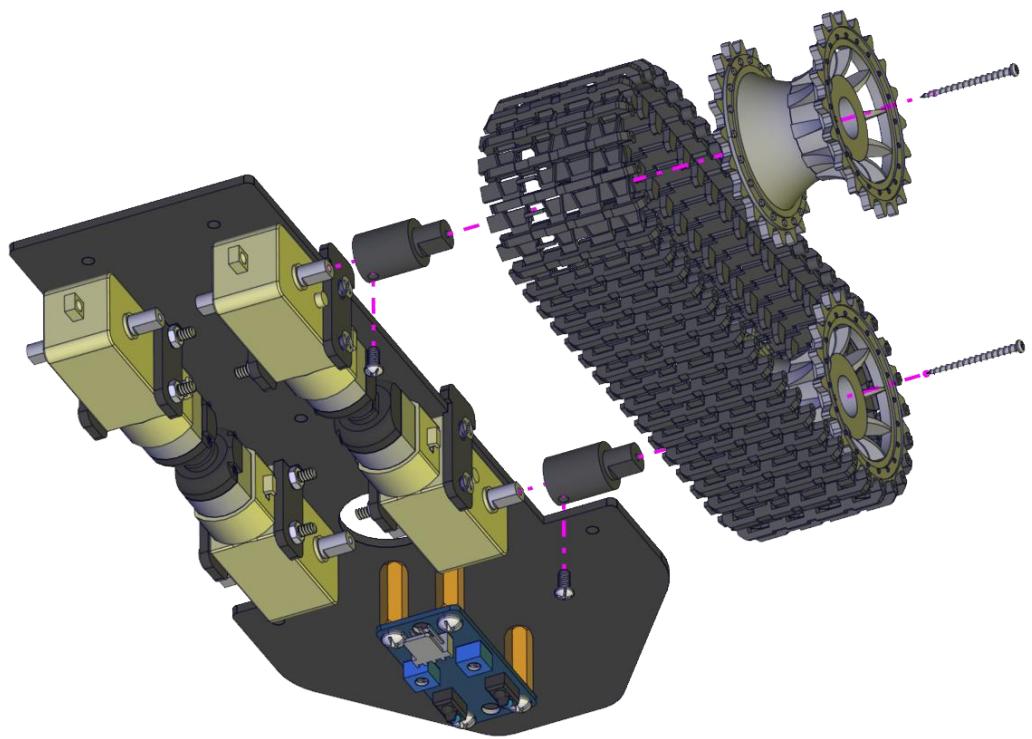
## Installation 4

Parts  
required  
for  
installati  
on



**Install**

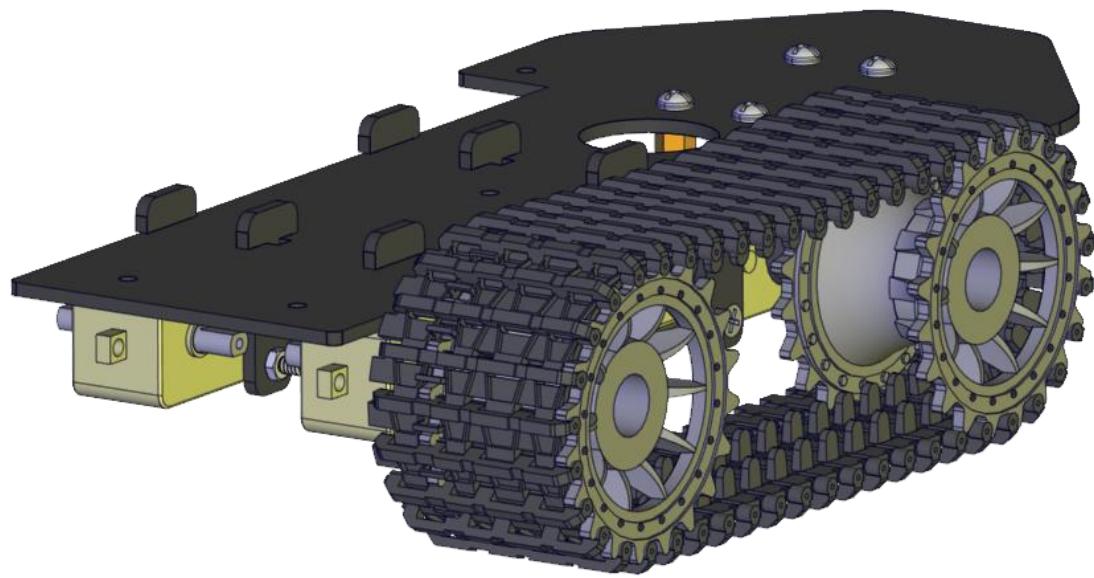
(Pay  
attention  
not to  
lock the  
tapping  
screw too  
tightly)



Installation Instructions:

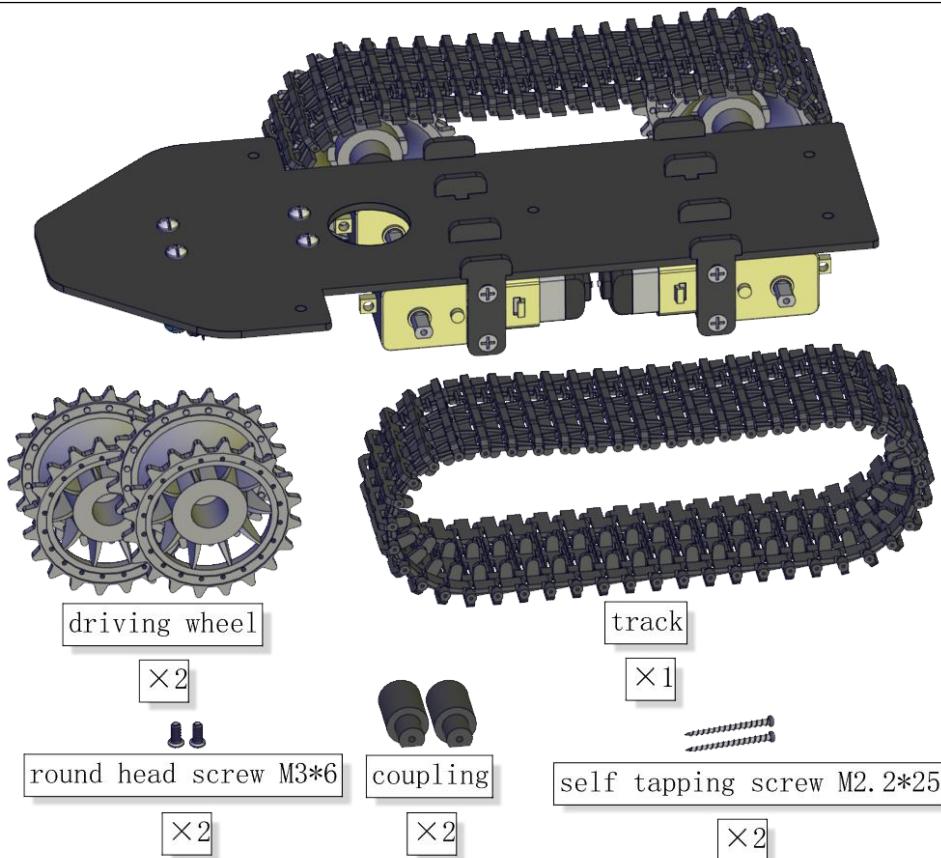
1. Install the coupling for two motor shafts.
2. Install the tracks on the two drive wheels.
3. Install the drive wheel not installed on the coupling.

complete



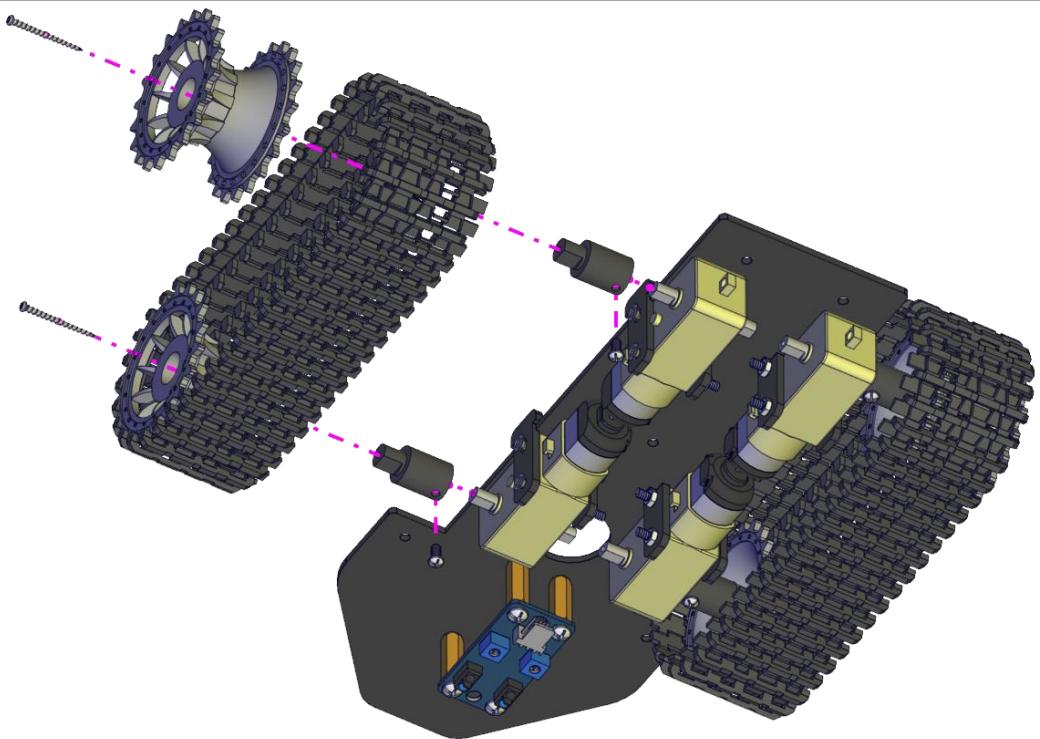
## Installation 5

Parts  
required  
for  
installati  
on

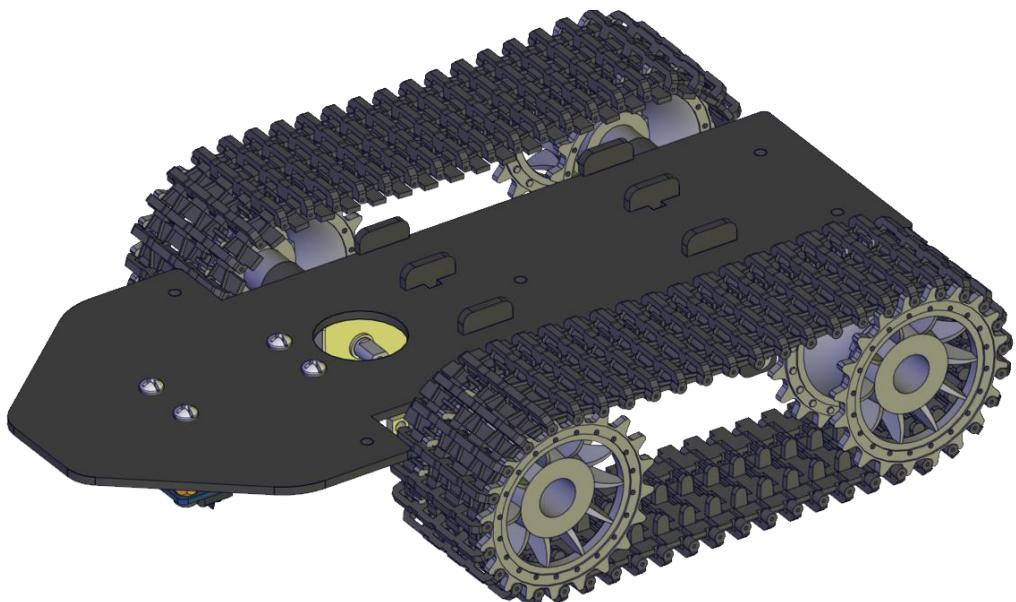


install

(Pay  
attention  
not to  
lock the  
tapping  
screw too  
tightly)



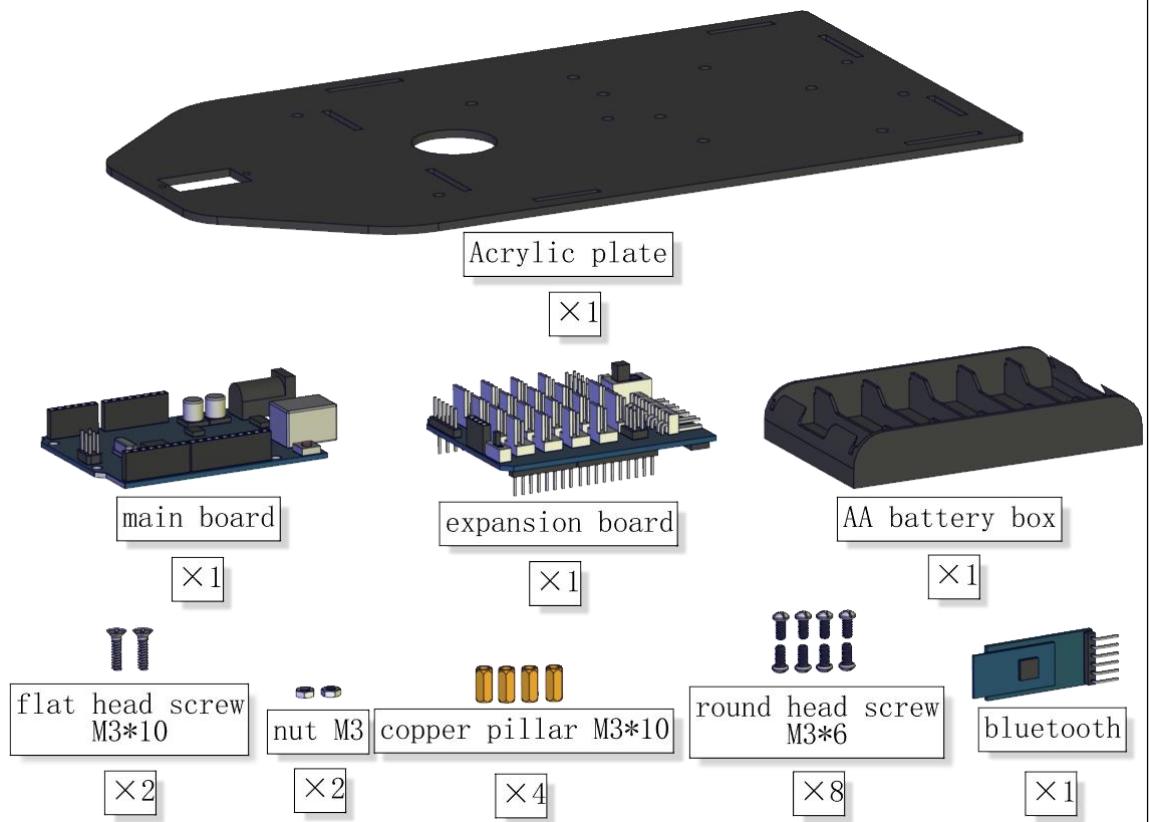
complete



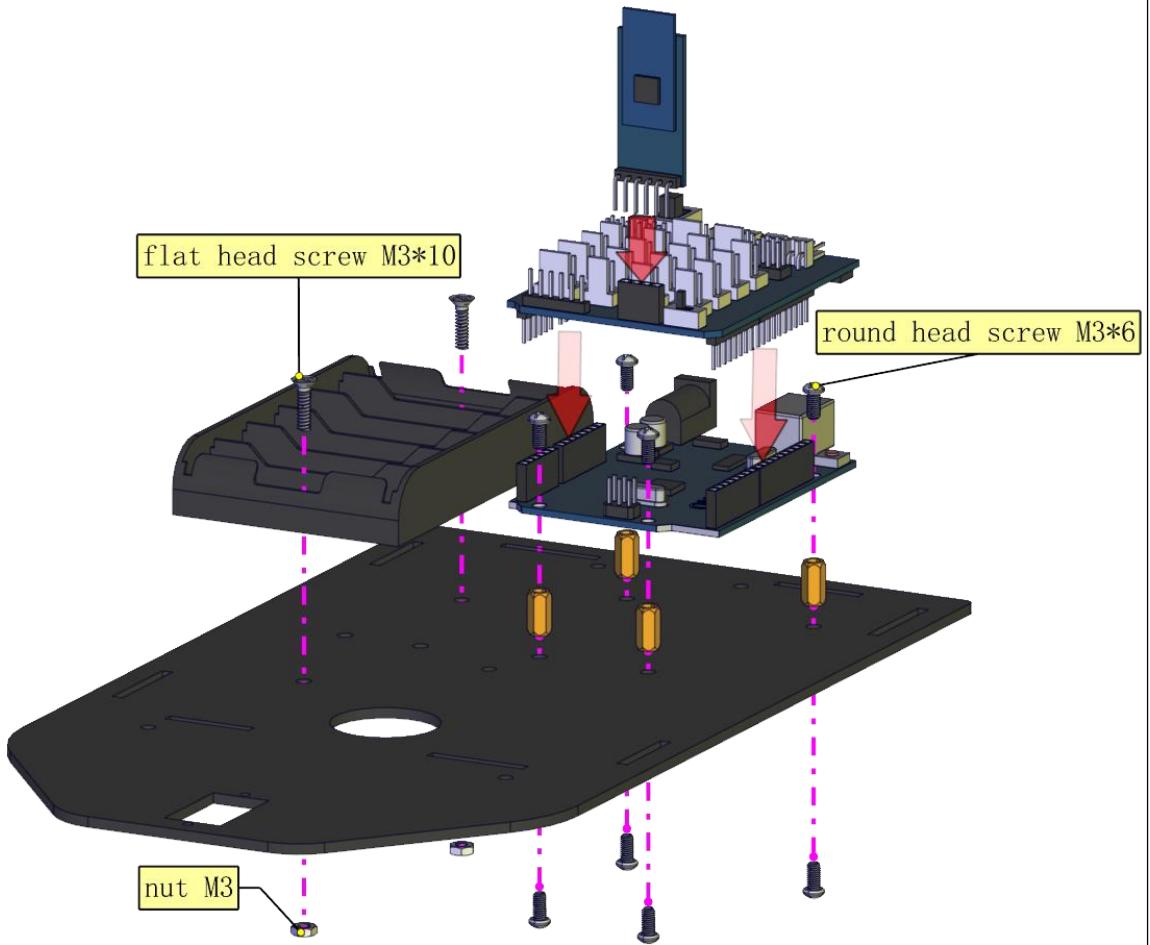
## Installation 6

To install 18650 battery box, see Installation 7

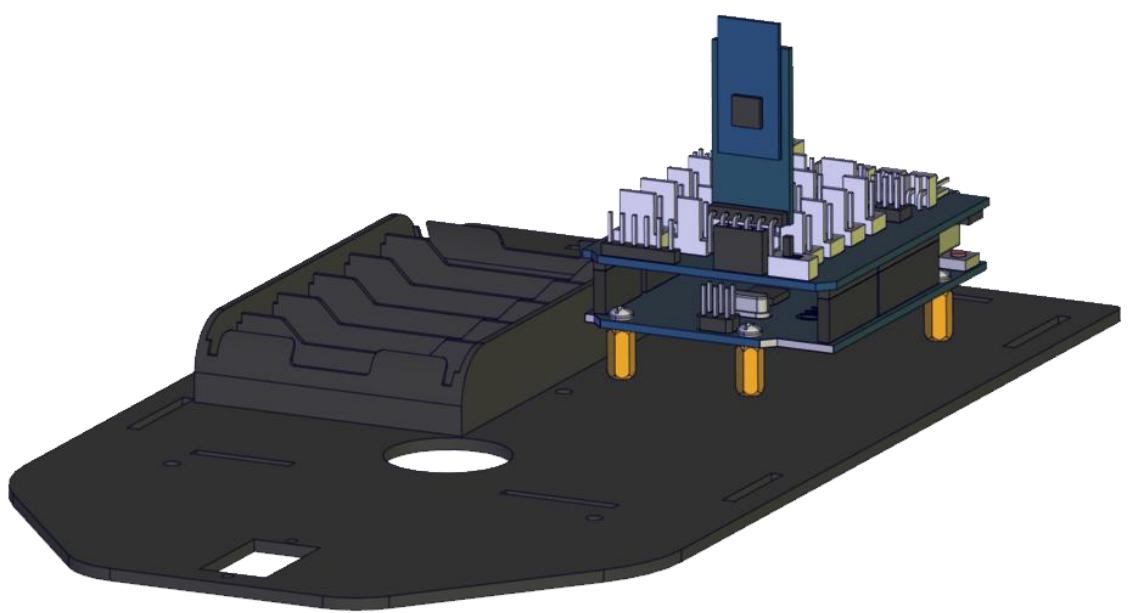
Parts  
required  
for  
installati  
on



Install  
(Pay  
attention  
to the  
installation  
direction of  
the  
Bluetooth  
module)



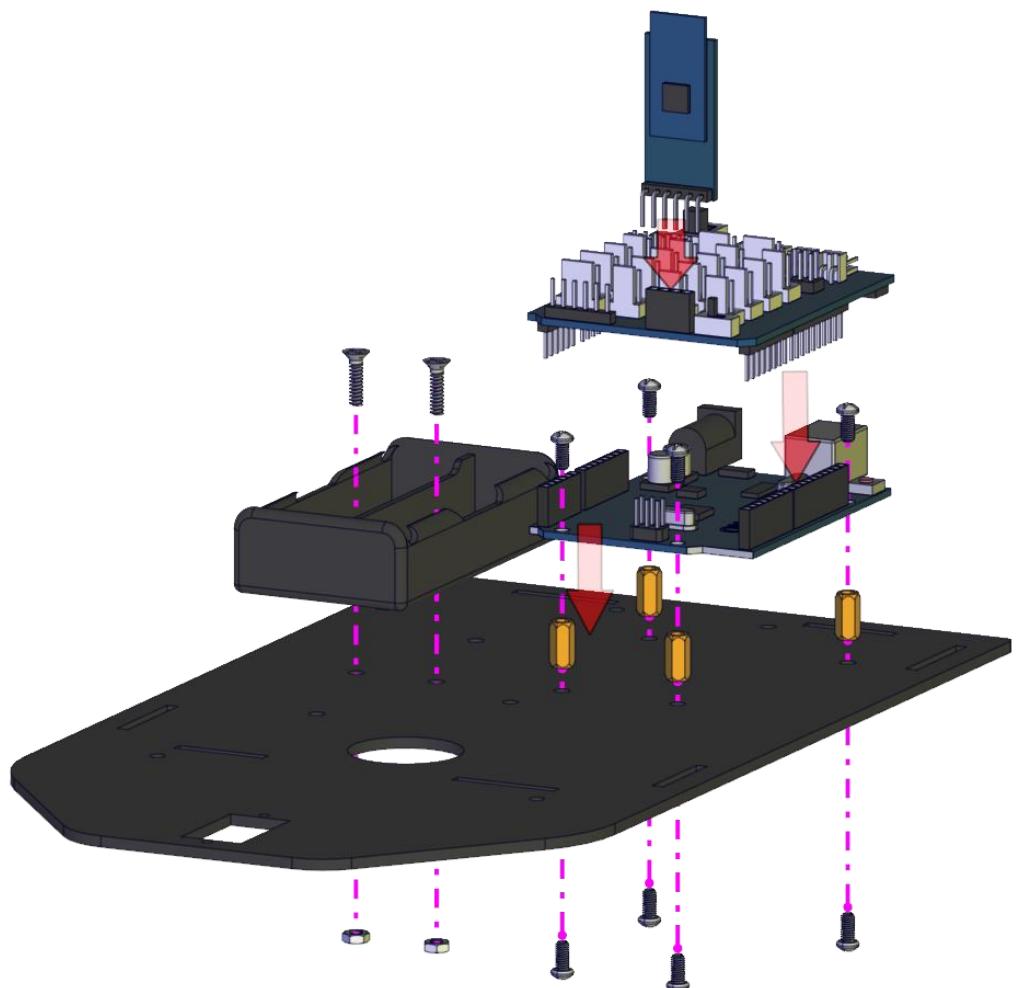
complete



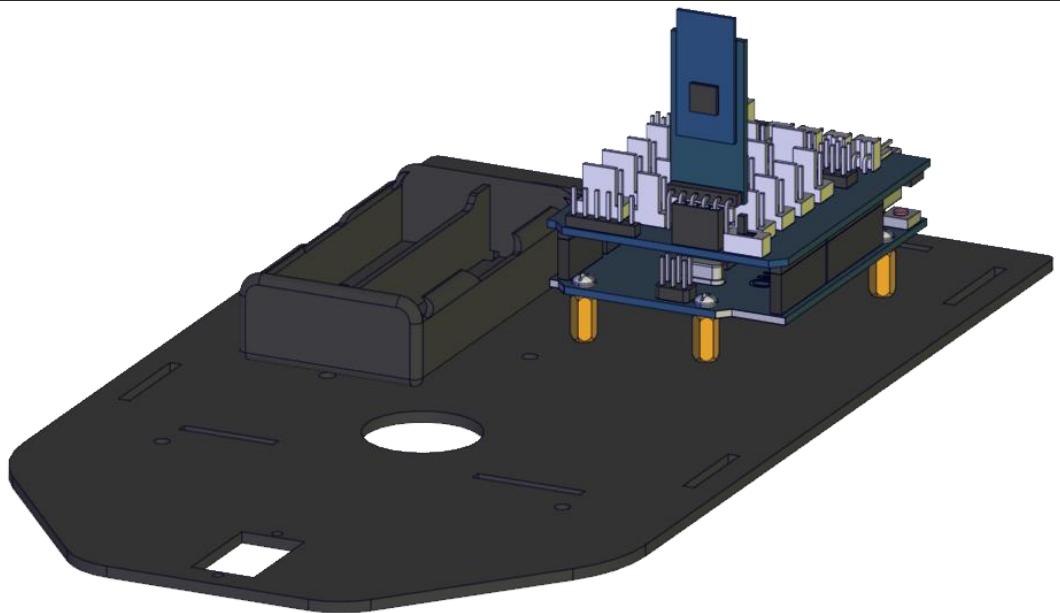
## Installation 7

Install  
18650  
battery  
box

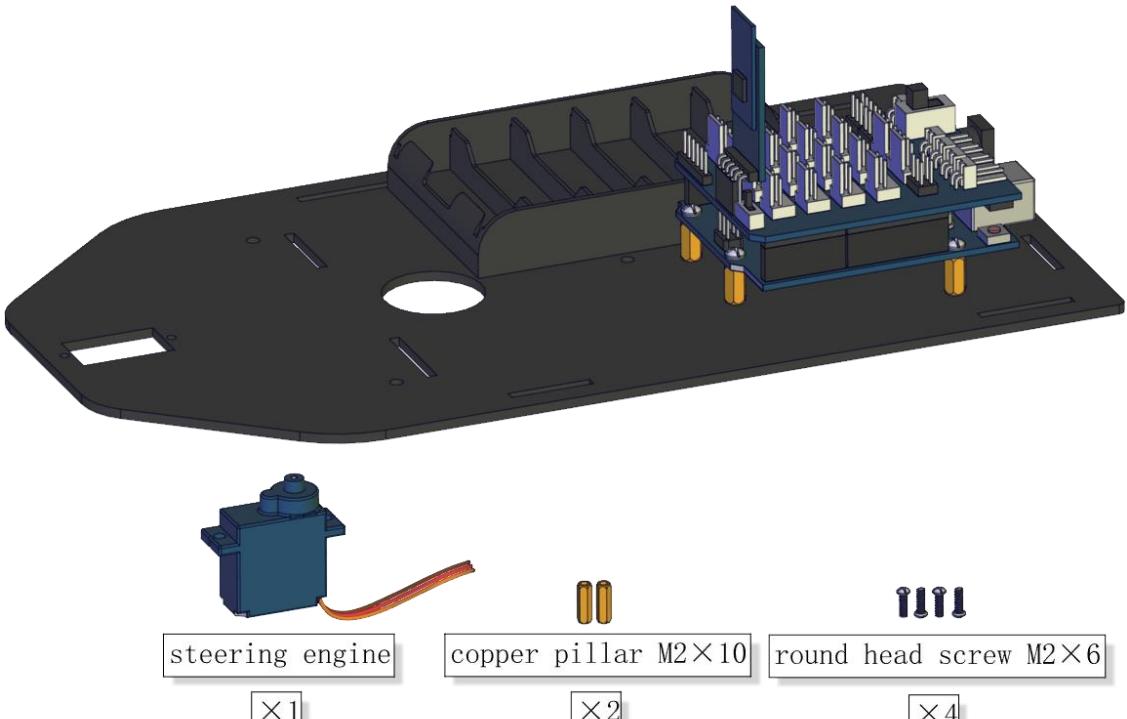
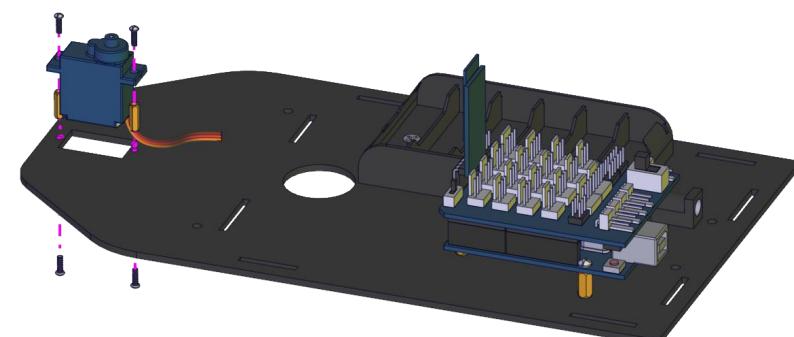
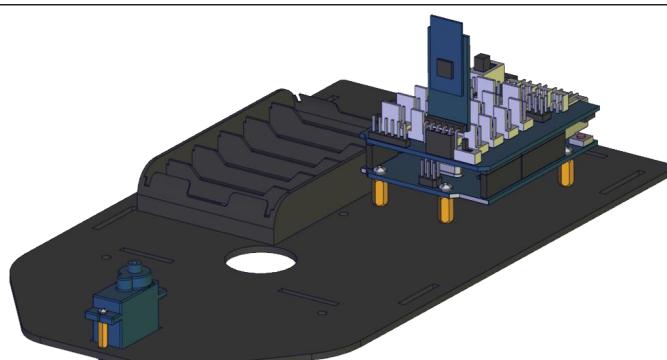
(Pay  
attention  
to the  
installation  
direction  
of the  
Bluetooth  
module)



complete

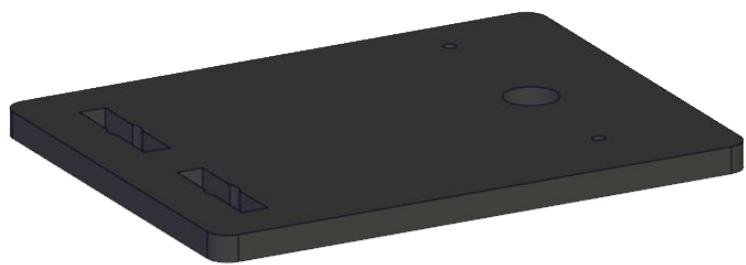


# Installation 8

Parts required for installation	 <p>steering engine copper pillar M2×10 round head screw M2×6 ×1                    ×2                    ×4</p>
install	 <p>First pass the wire of steering gear through the hole.</p>
complete	

# Installation 9

Parts  
required  
for  
installati  
on



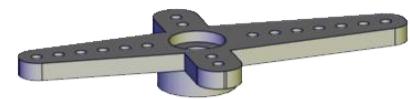
Acrylic plate

×1



self tapping screw M1.2×6

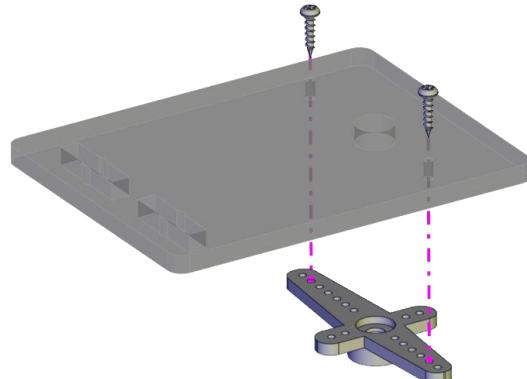
×2



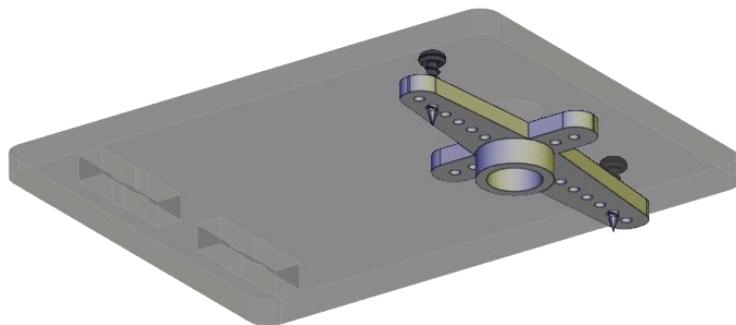
steering engine rocker arm  
(Included in steering engine package)

×1

install

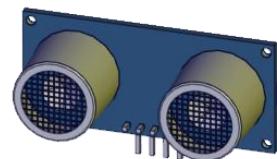
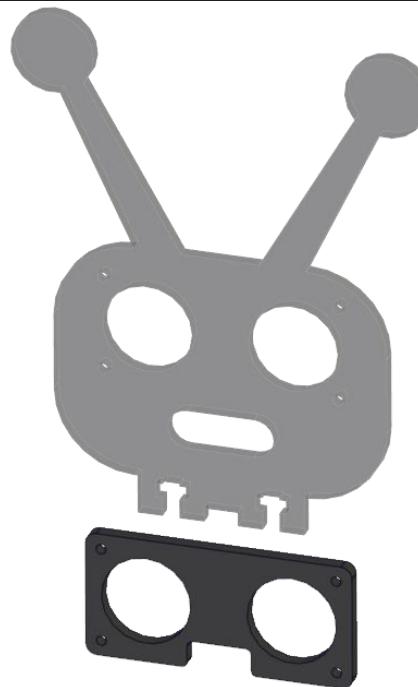


complete



# Installation 10

Parts  
required  
for  
installati  
on



Ultrasonic module

×1



round head screw M1.4×10

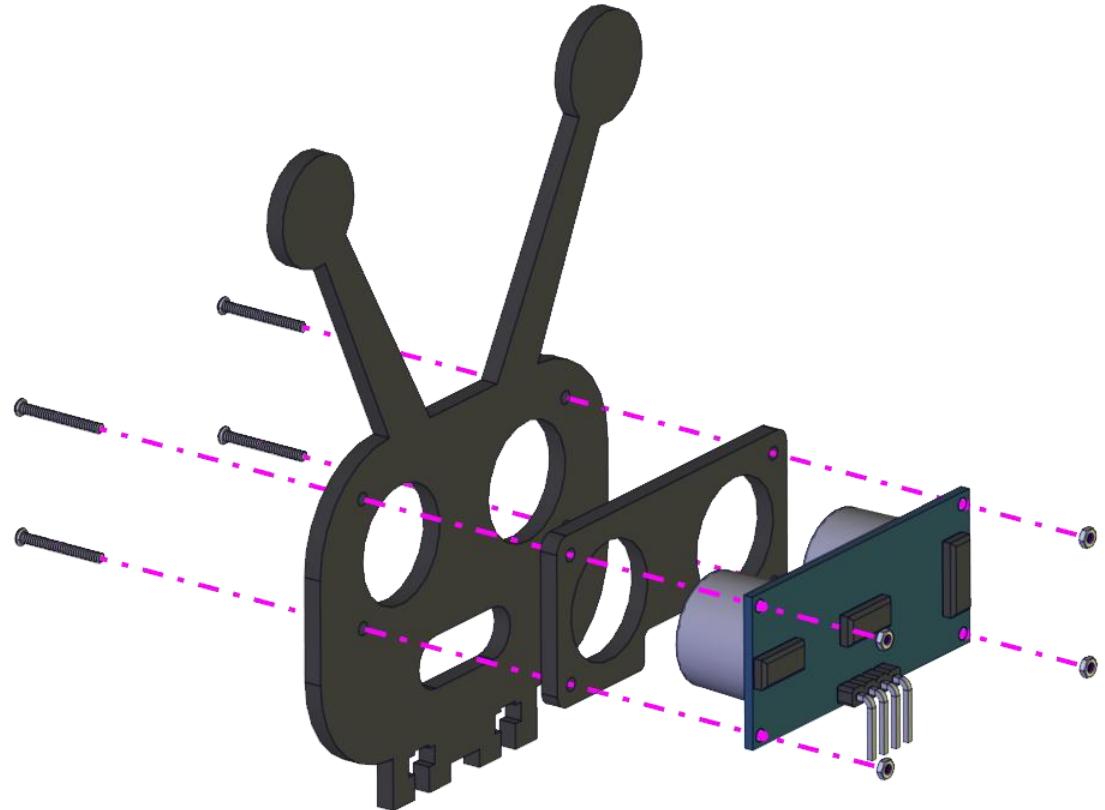
×4



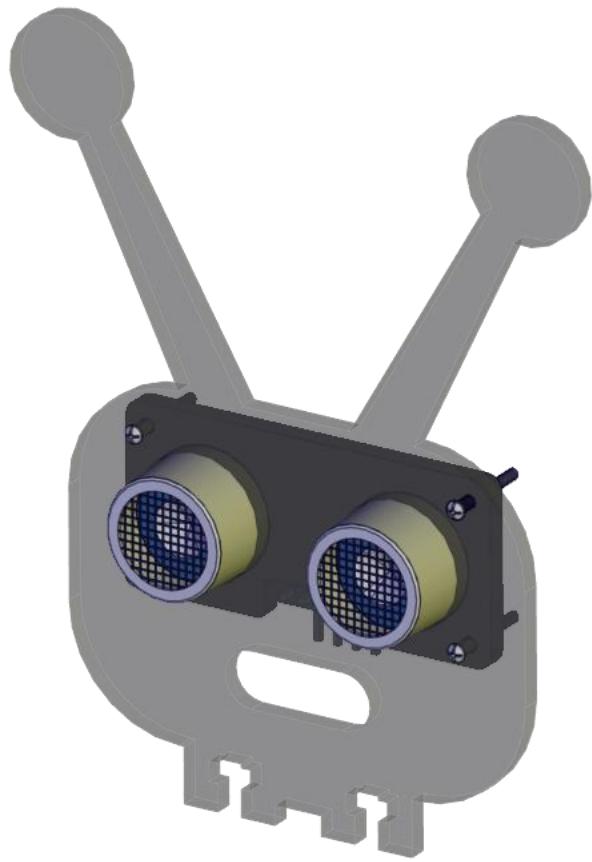
nut M1.4

×4

install

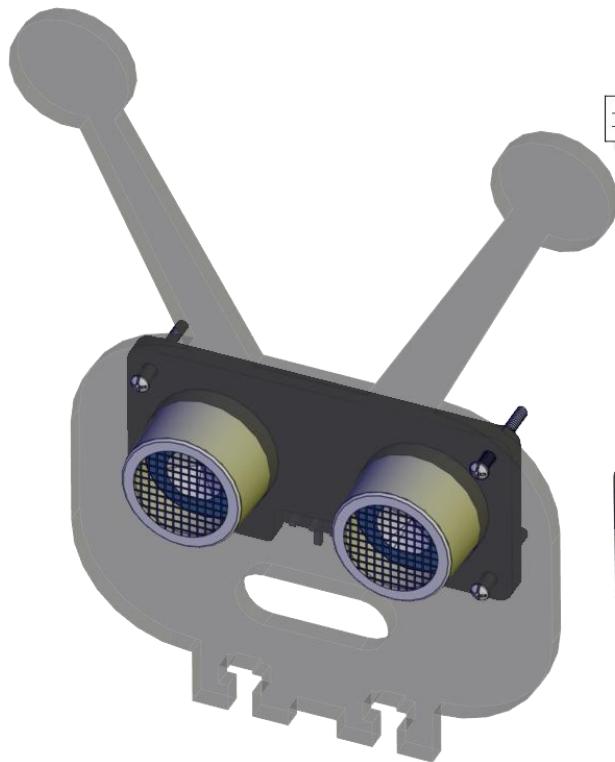


complete



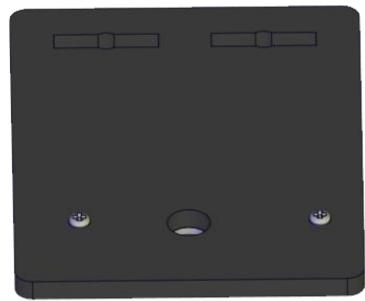
# Installation 11

Parts  
required  
for  
installati  
on

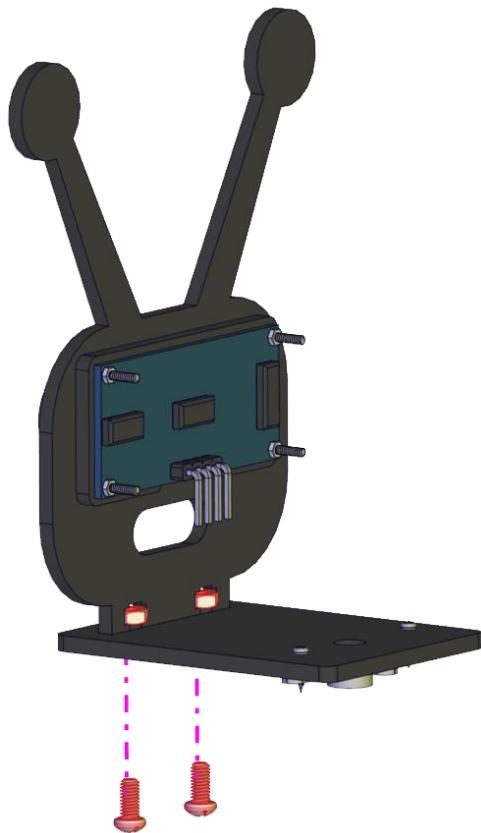


round head screw M3×6  
×2

nut M3  
×2



Install

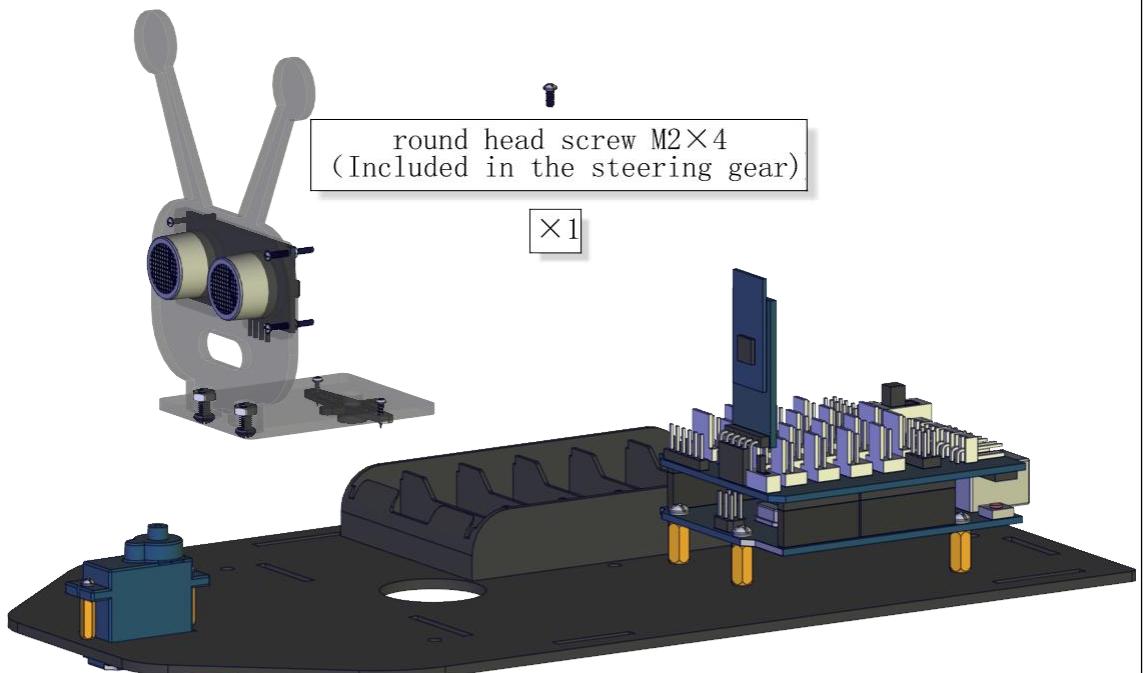


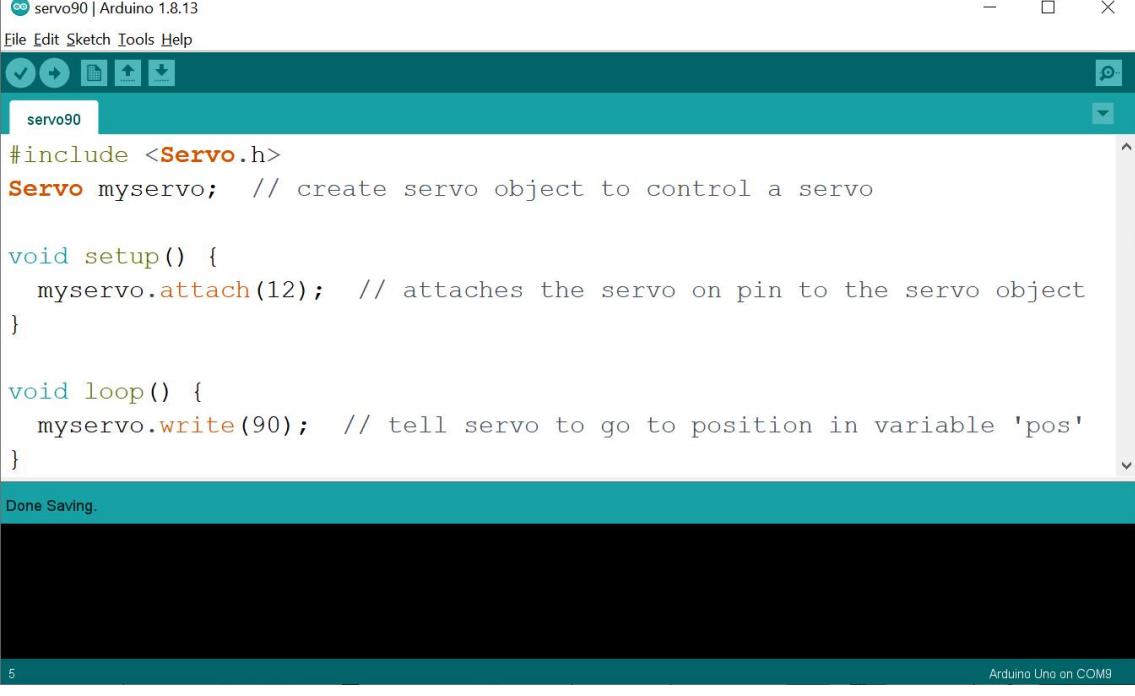
complete



## Installation 12

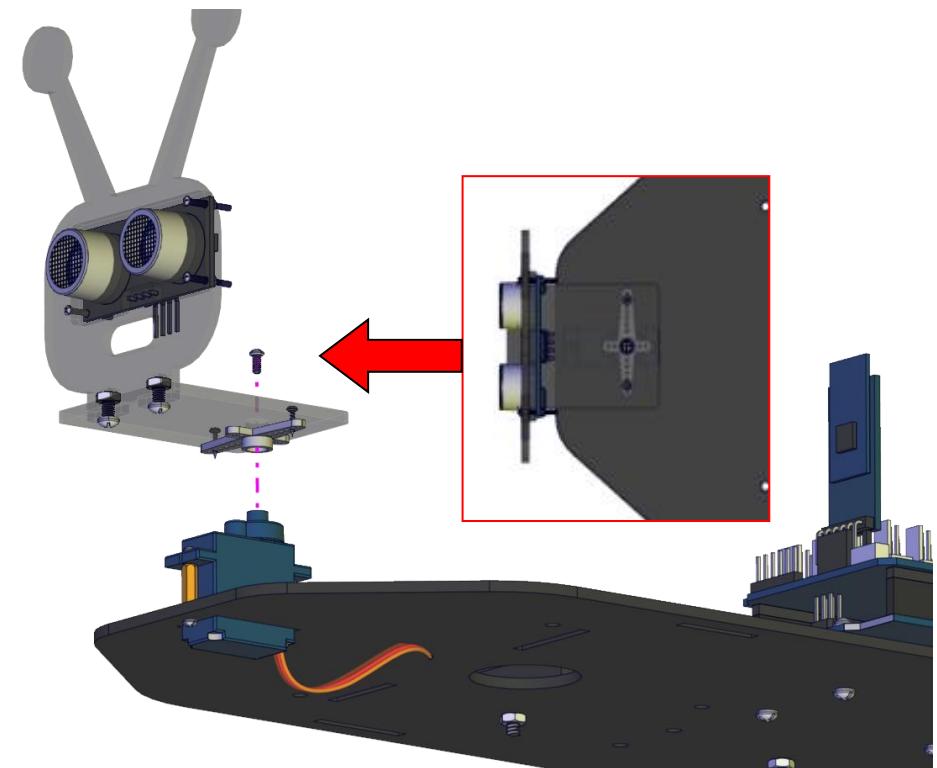
Parts  
required  
for  
installati  
on



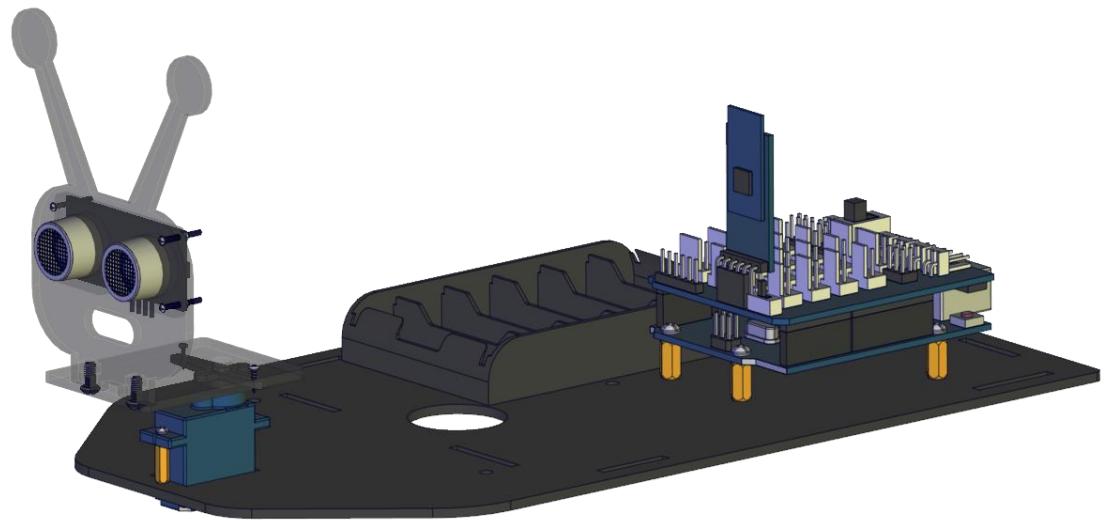
<p>Write code before installation, and adjust the steering gear to 90 °</p>	<p>Connect the arduino UNO to your computer with a data cable, edit the following code in the arduino IDE, and click Upload code.</p>  <p>You can directly copy the following code:</p> <pre>#include &lt;Servo.h&gt; Servo myservo; // create servo object to control a servo  void setup() {     myservo.attach(12); // attaches the servo on pin 12 to the servo object }  void loop() {     myservo.write(90); // tell servo to go to position }</pre>
---	---

Install

(The installation angle shall be consistent with the figure)

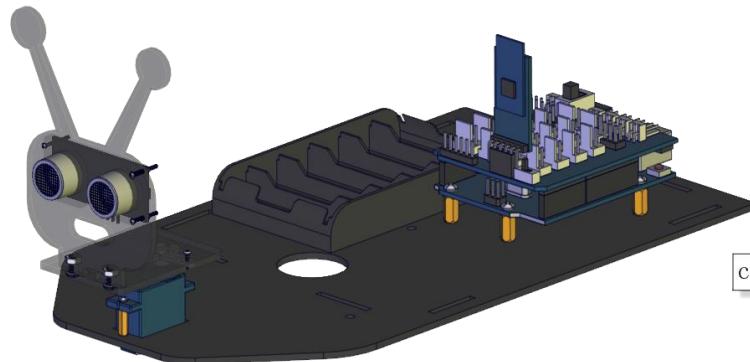


complete



# Installation 13

Parts  
required  
for  
installati  
on



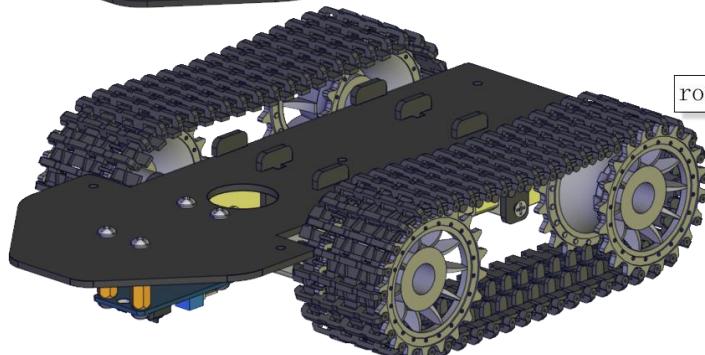
copper pillar M3×25

×5

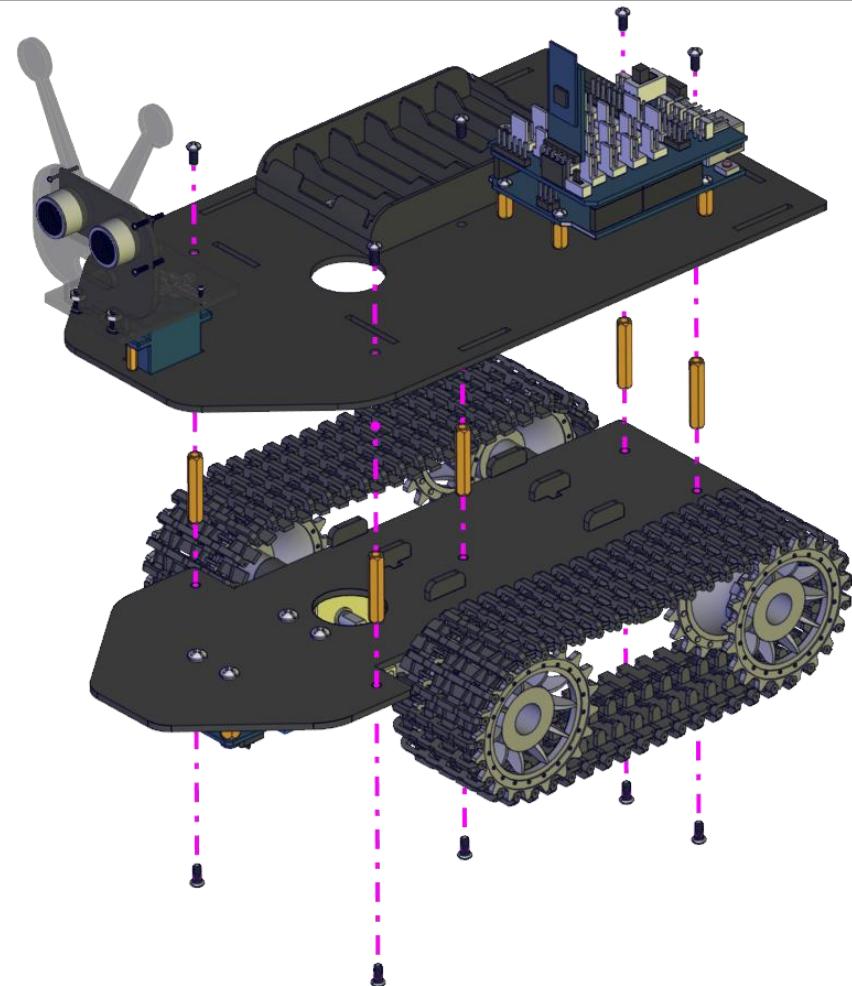


round head screw M3×6

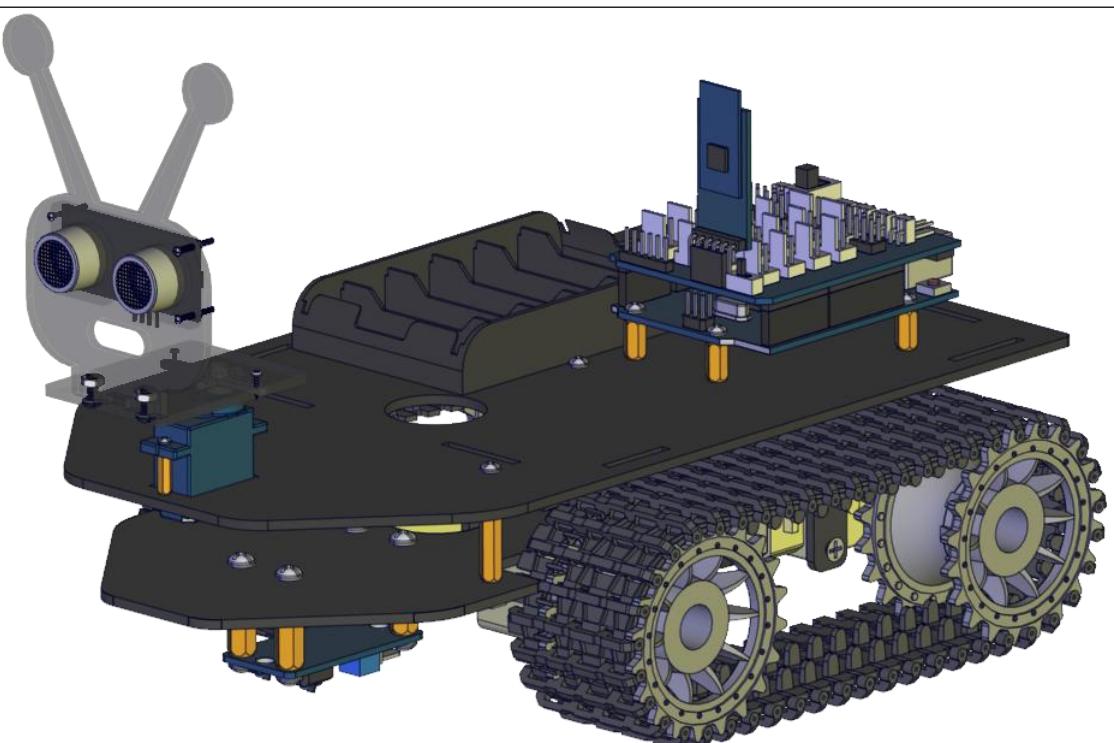
×10



Install

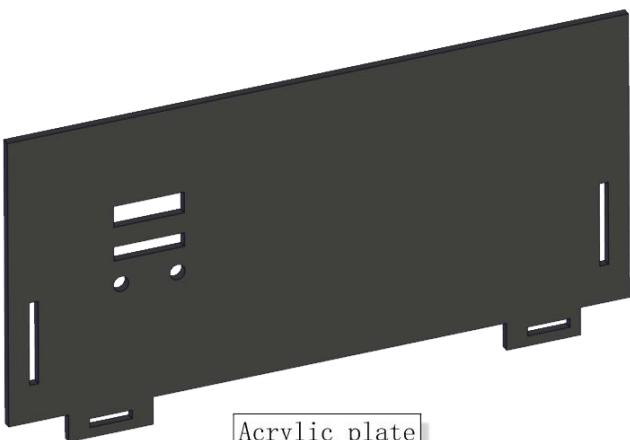


complete



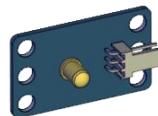
# Installation 14

Parts  
required  
for  
installati  
on



Acrylic plate

×1



yellow LED module

×1



round head screw M4×8

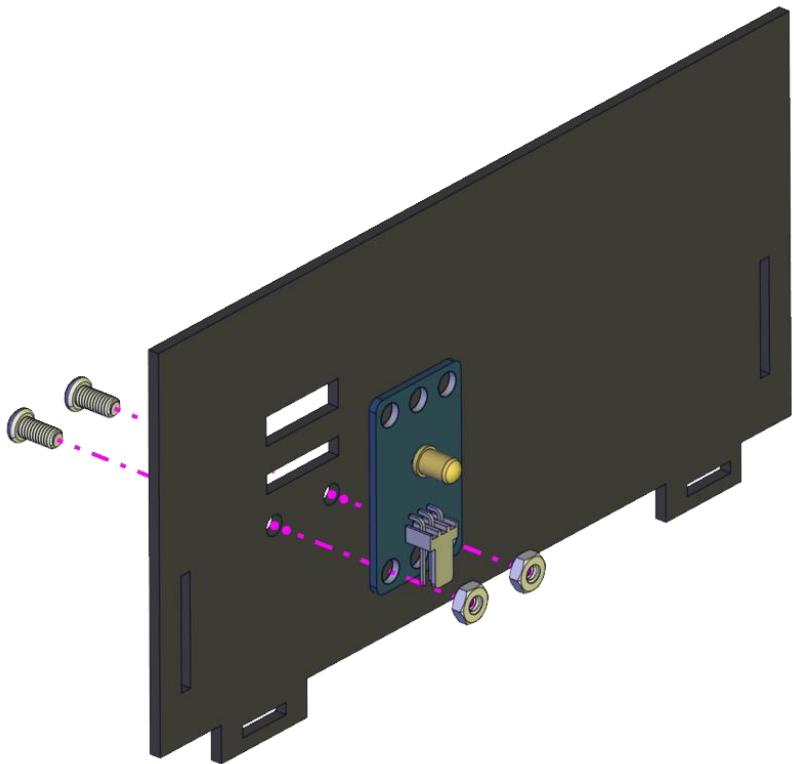
×2



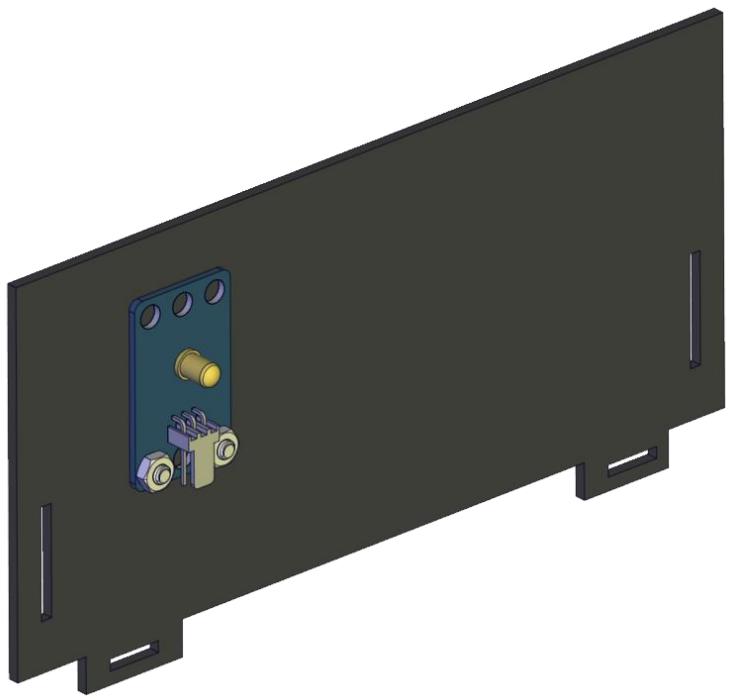
nut M4

×2

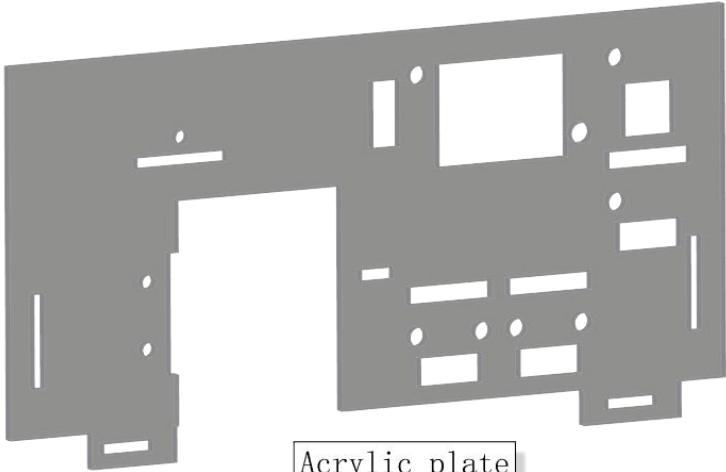
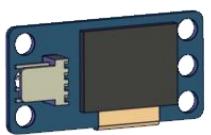
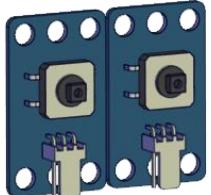
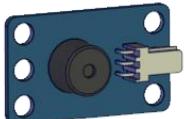
install

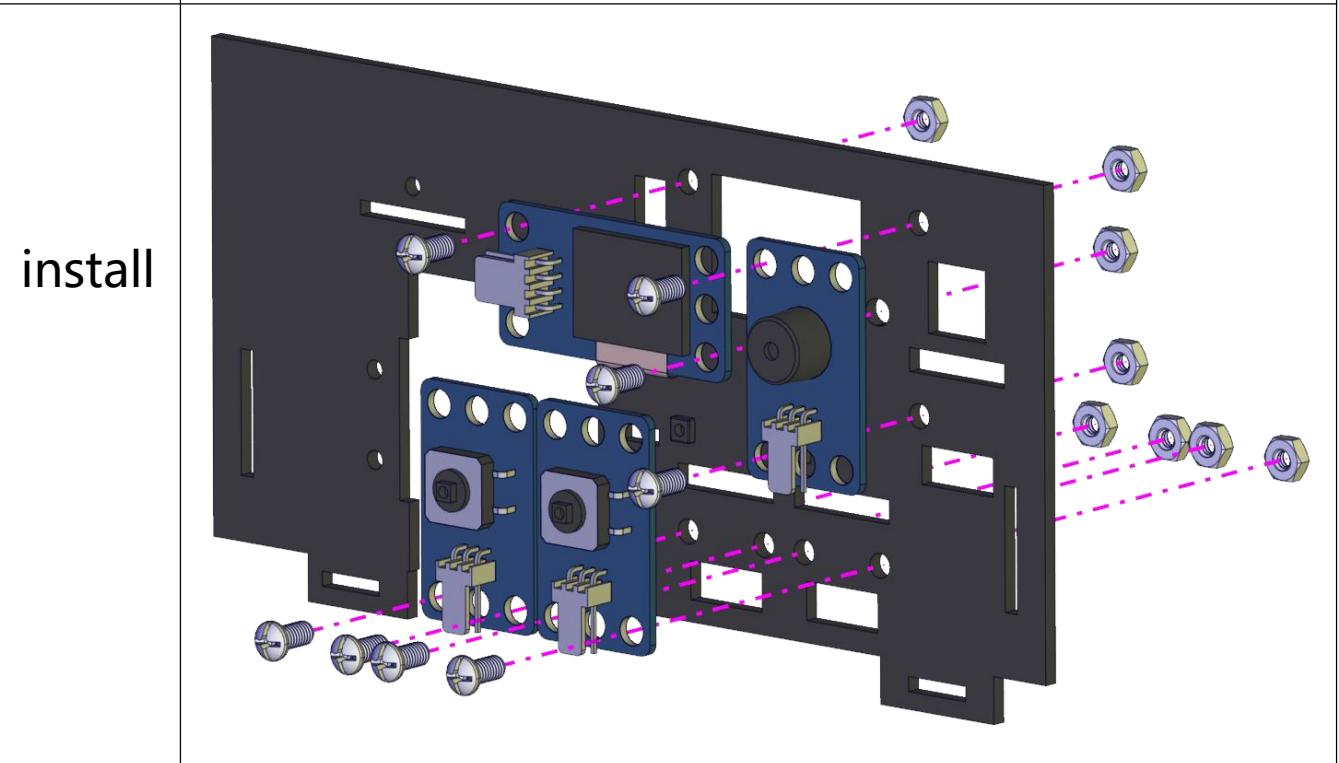


complete

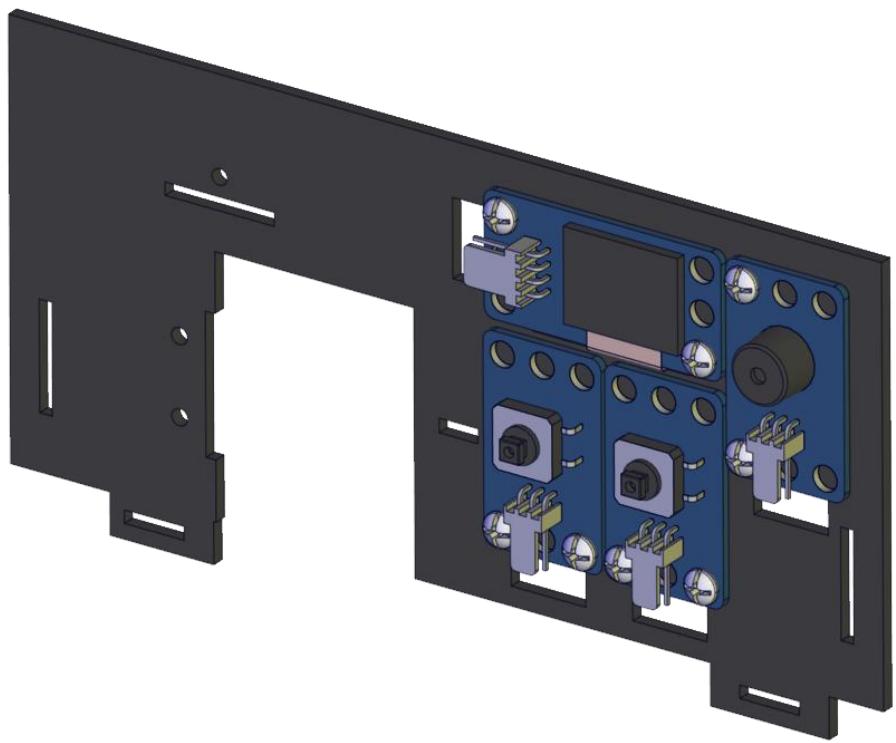


# Installation 15

Parts required for installation	 Acrylic plate ×1	 OLED module ×1
	 button module ×2	 buzzer module ×1
	 round head screw M4×8 ×8	 nut M4 ×8

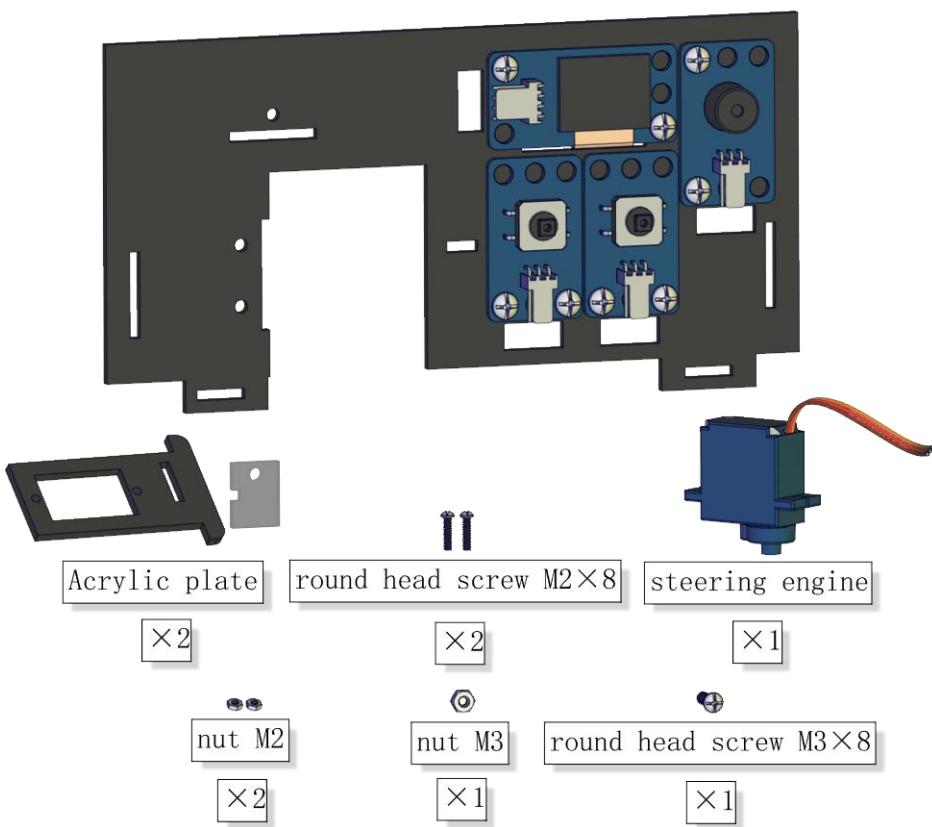


complete

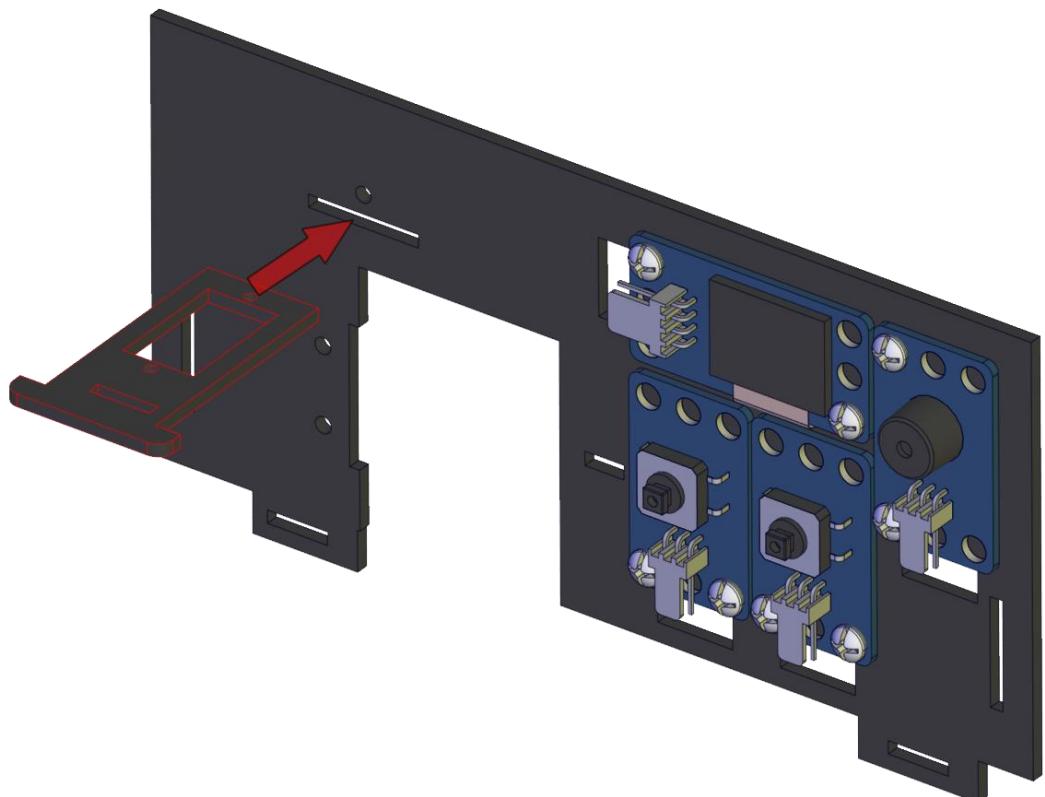


# Installation 16

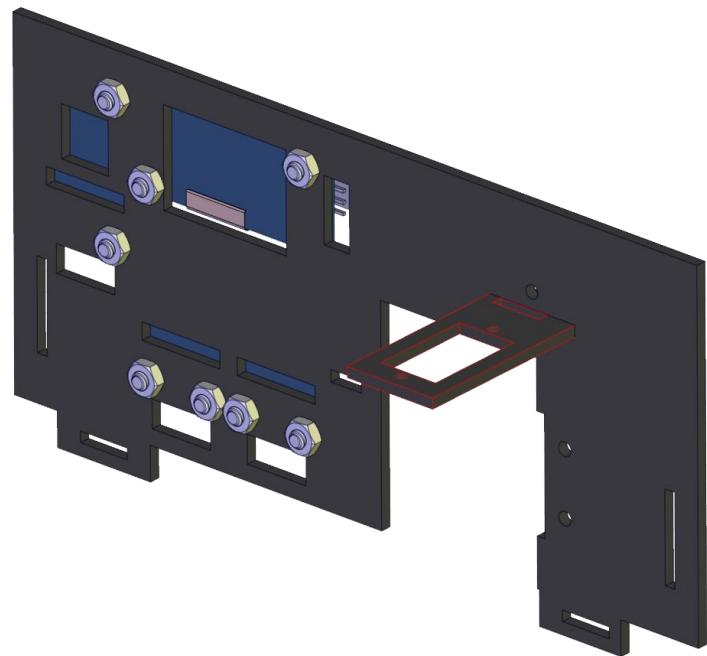
Parts  
required  
for  
installati  
on



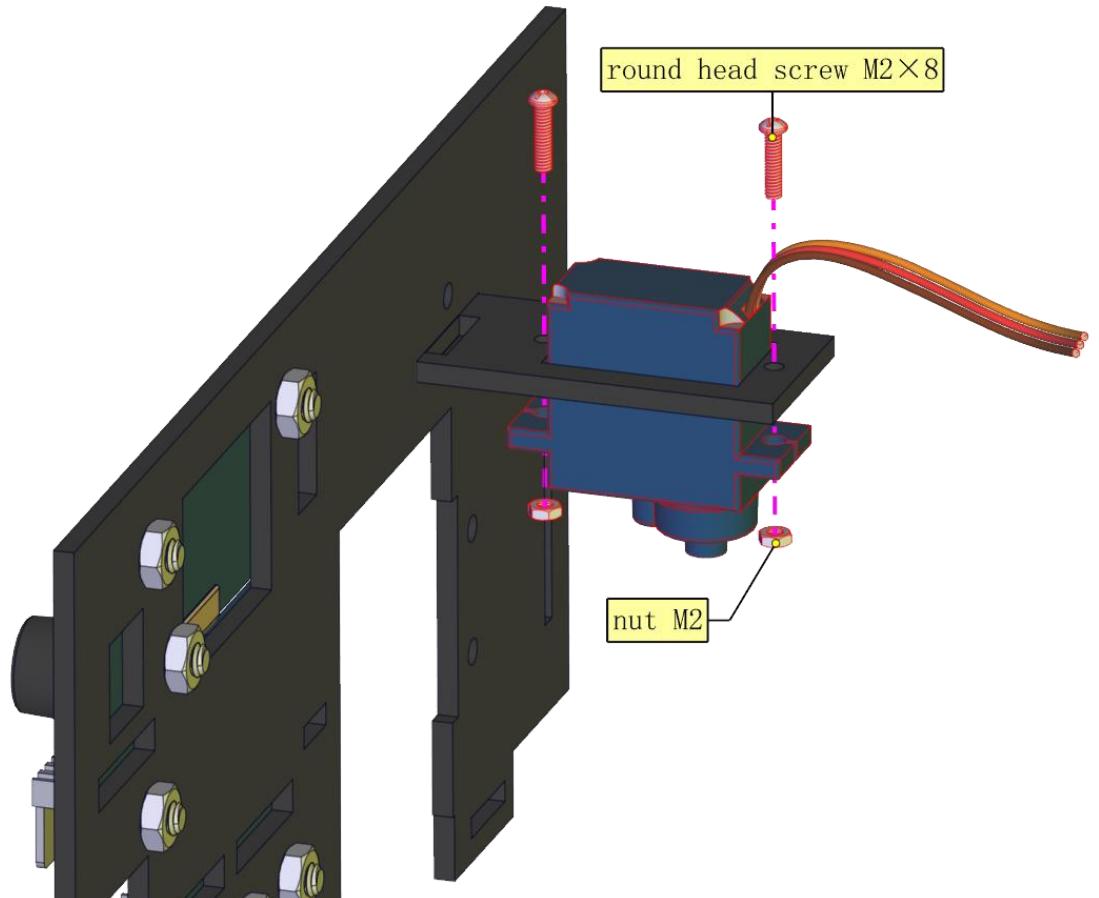
Step 1



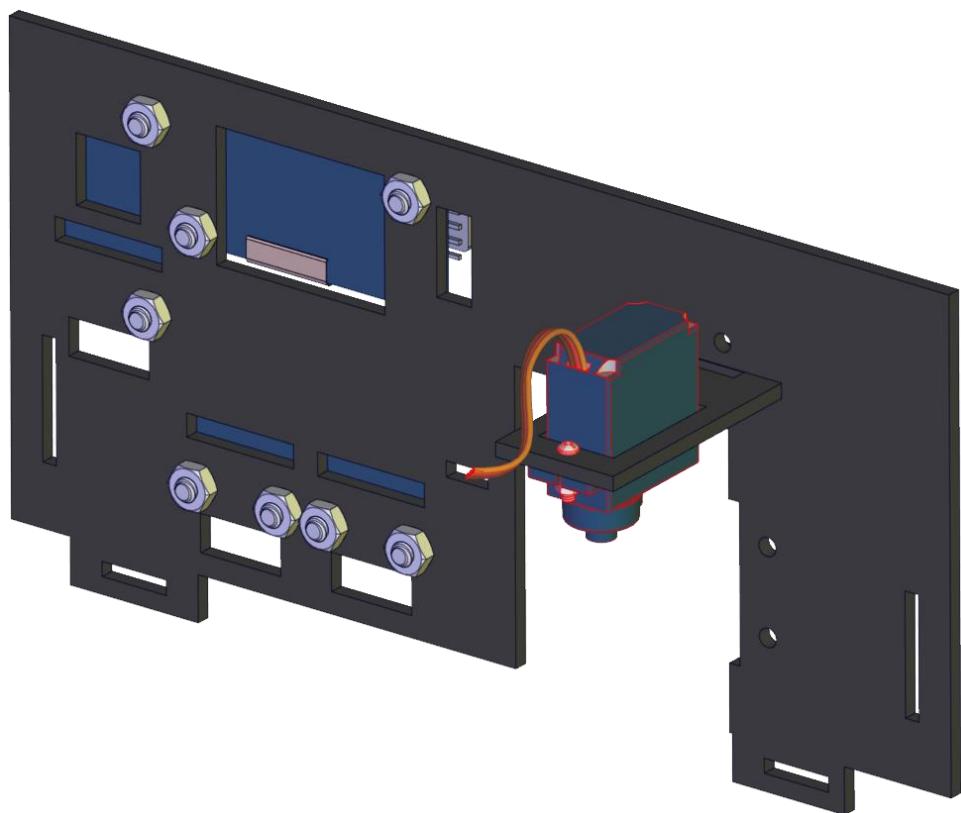
Step 1  
complete



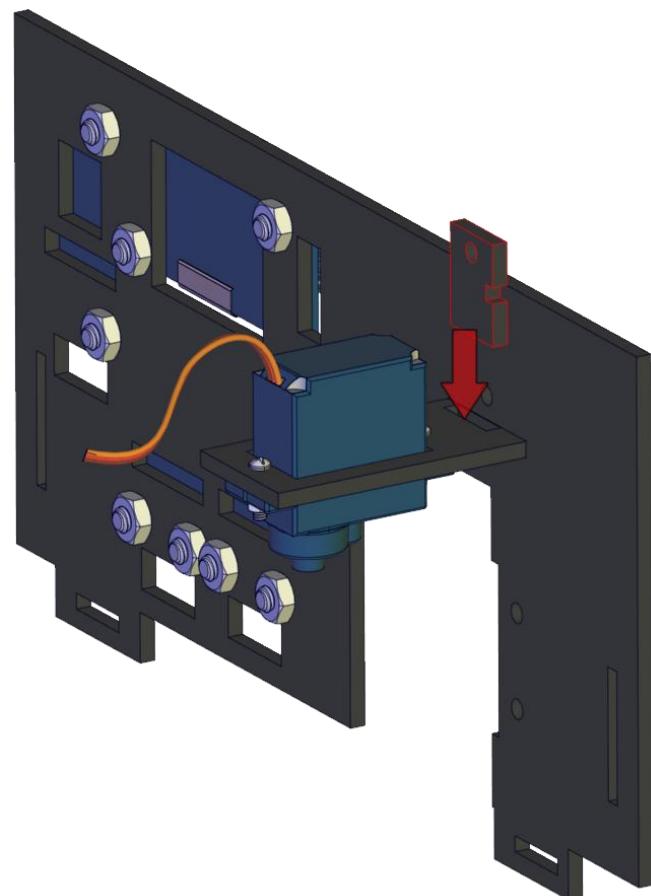
Step 2



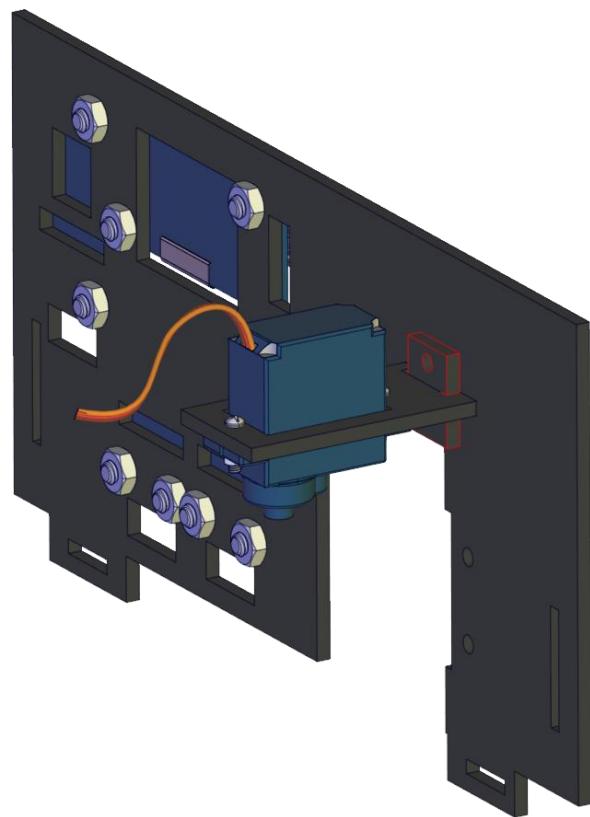
Step 2  
complete



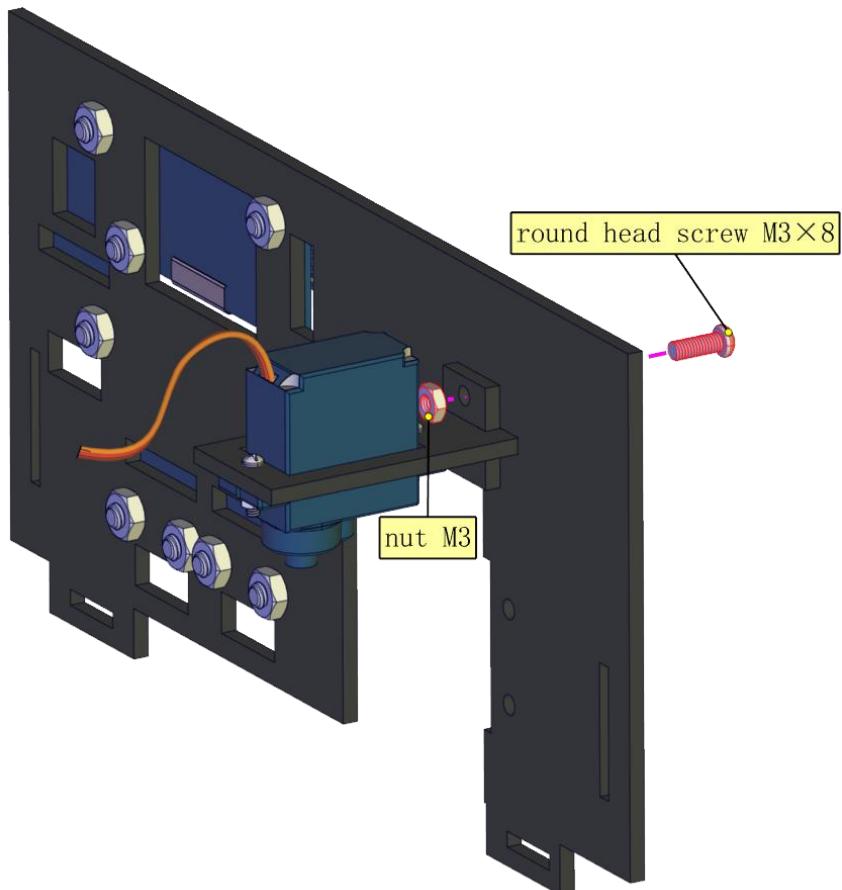
Step 3



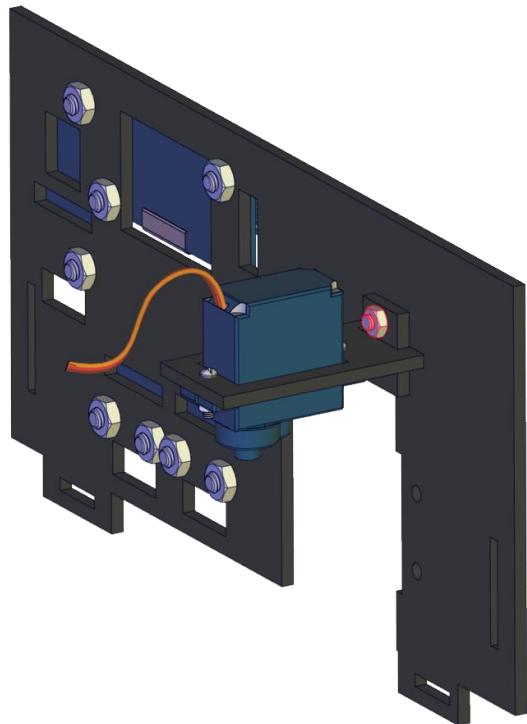
Step 3  
complete



Step 4

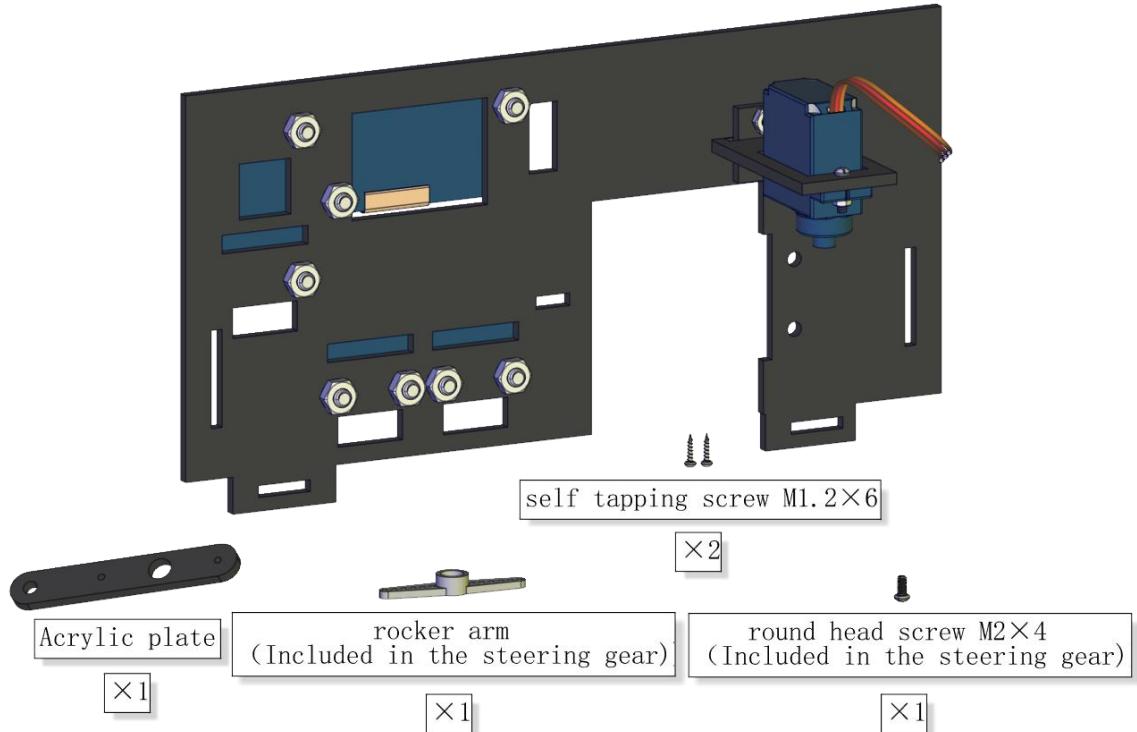


complete



## Installation 17

Parts  
required  
for  
installati  
on



Write code before installation, and adjust the steering gear to 90 °

Connect the arduino UNO to your computer with a data cable, edit the following code in the arduino IDE, and click Upload code.



The screenshot shows the Arduino IDE interface with the following details:

- Sketch name: servo90
- IDE version: 1.8.13
- File menu: File Edit Sketch Tools Help
- Toolbar icons: Save, Run, Stop, Reload, Open, Upload, Download, Serial Monitor, and a gear icon.
- Code area:

```
#include <Servo.h>
Servo myservo; // create servo object to control a servo

void setup() {
  myservo.attach(11); // attaches the servo on pin 11 to the servo object
}

void loop() {
  myservo.write(90); // tell servo to go to position in variable 'pos'
}

Done Saving.
```
- Bottom status bar: \arduino-1.8.13-windows\arduino-1.8.13\libraries\OLED: no headers files (.h)
- Bottom right: Arduino Uno on COM9

You can directly copy the following code:

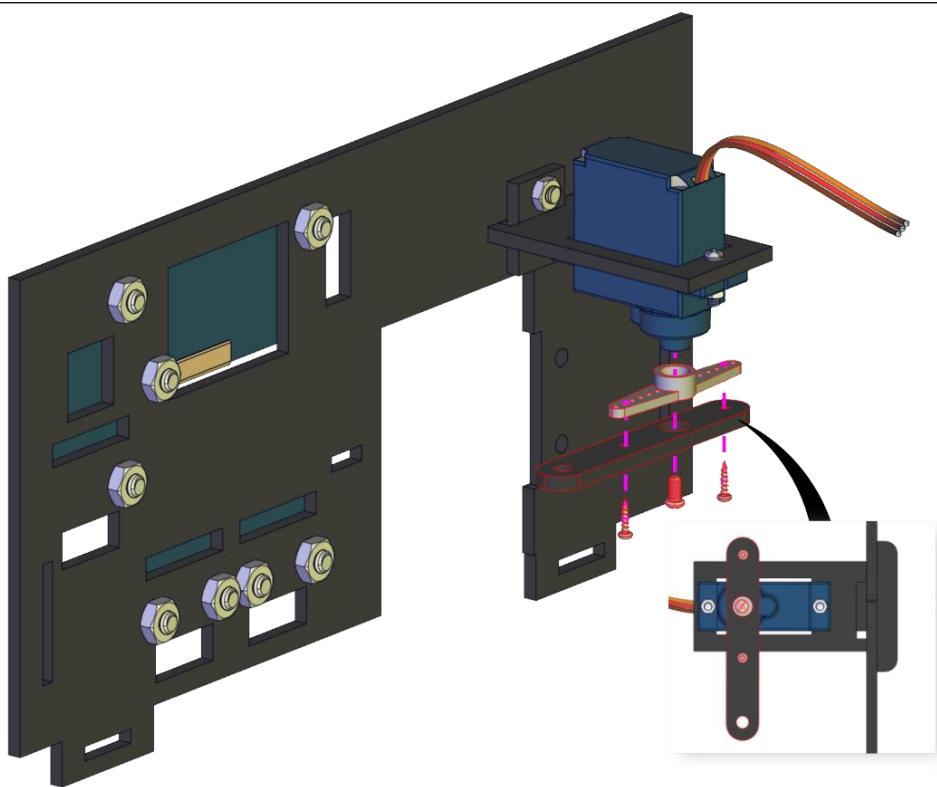
```
#include <Servo.h>
Servo myservo; // create servo object to control a servo

void setup() {
  myservo.attach(11); // attaches the servo on pin 11 to the servo object
}

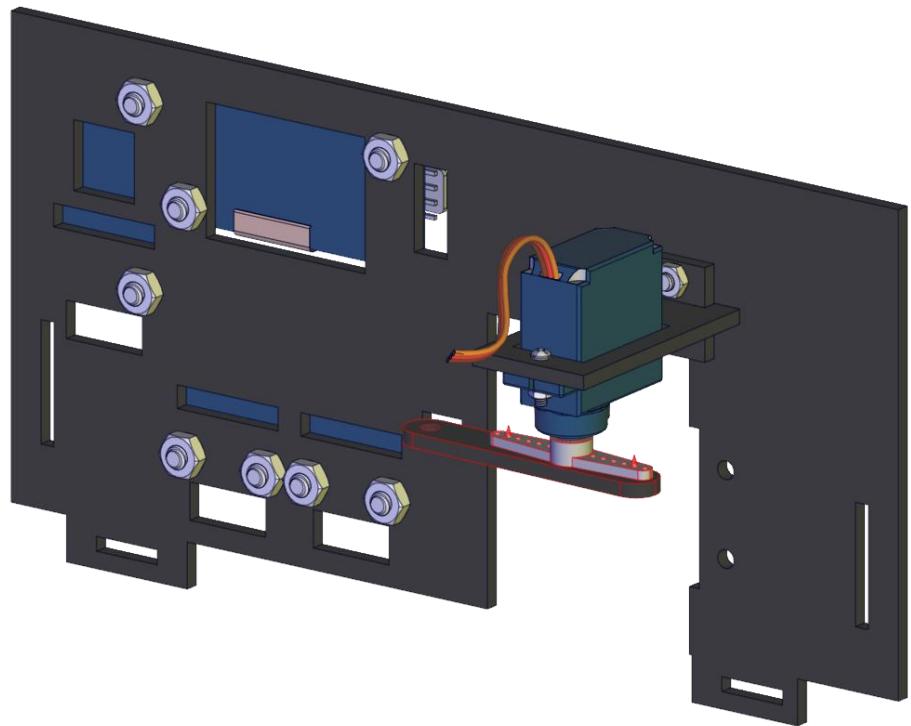
void loop() {
  myservo.write(90); // tell servo to go to position in variable 'pos'
```

## Install

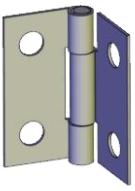
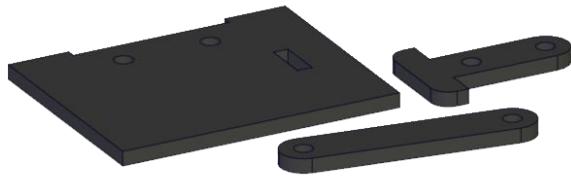
(The installation angle shall be consistent with the figure)



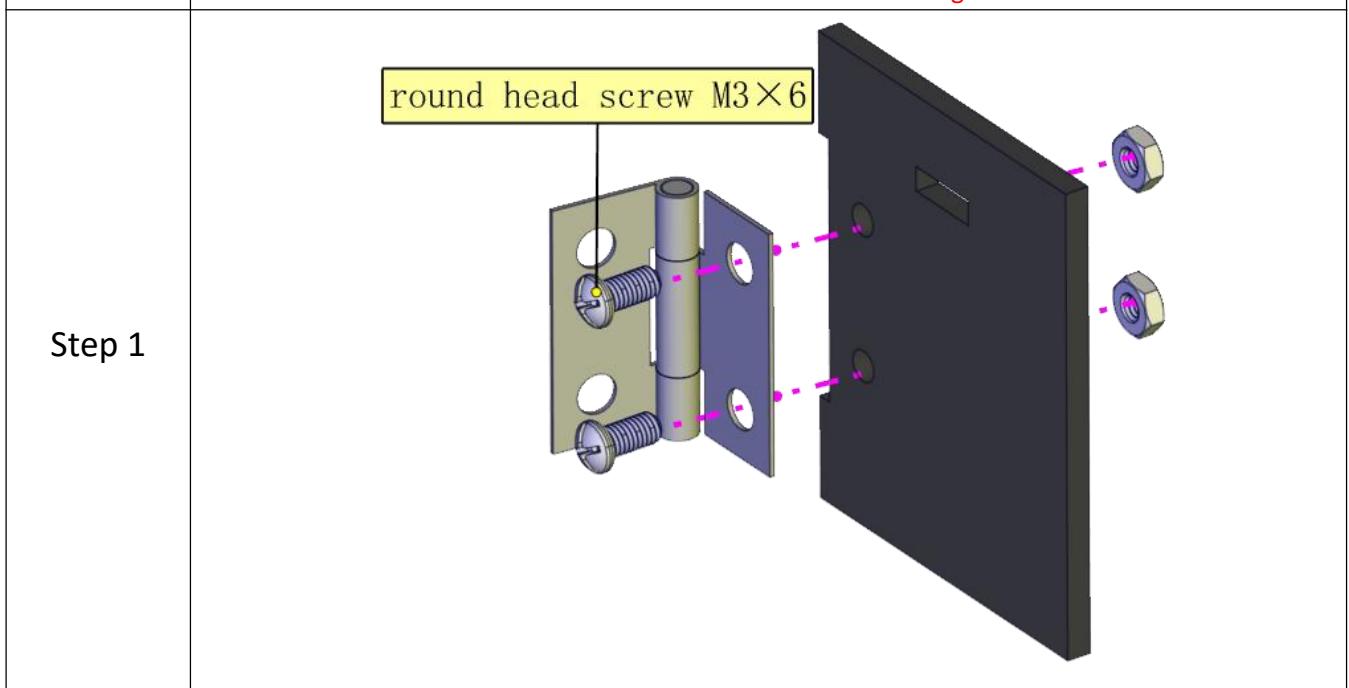
complete



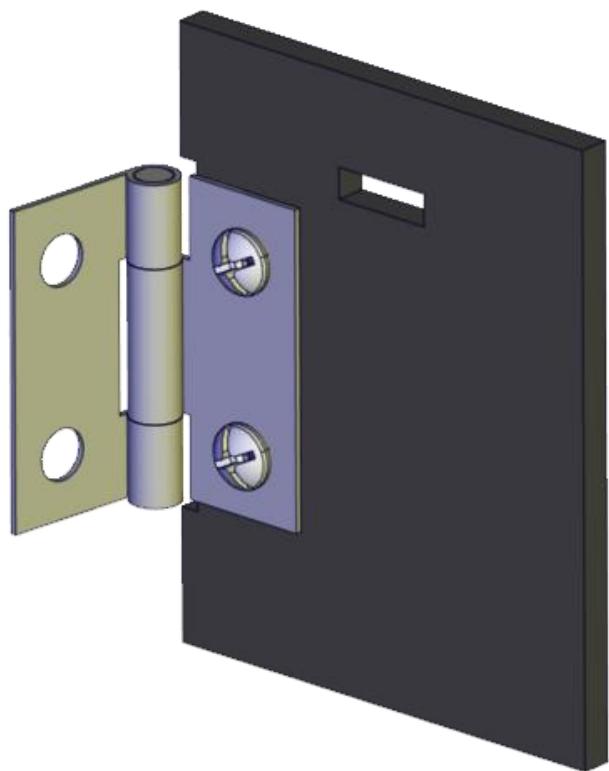
## Installation 18

Parts required for installation on	 hinge ×1	 Acrylic plate ×3		
	 round head screw M3×6 ×3	 nut M3 ×3	 half tooth screw M3×12 ×1	 Self-locking nut M3 ×1

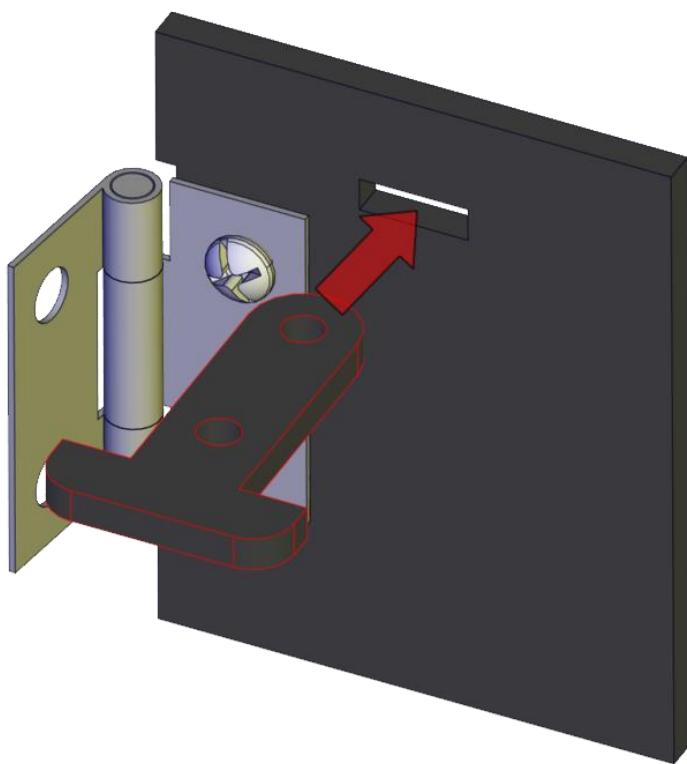
Note: The door is not the same size as the window. The door is larger.



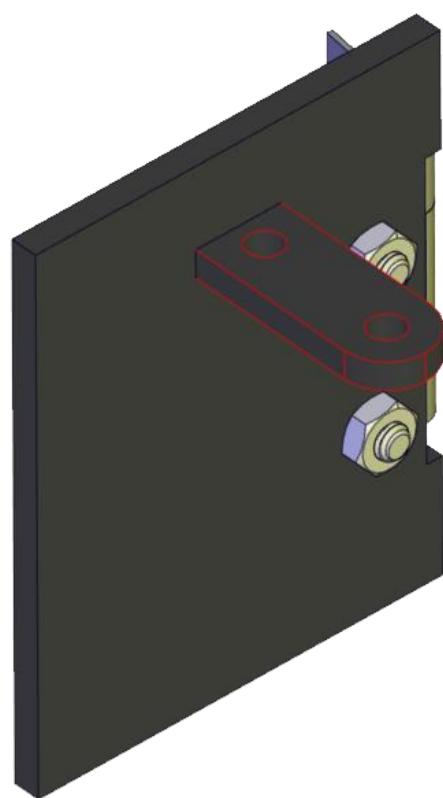
Step 1  
complete



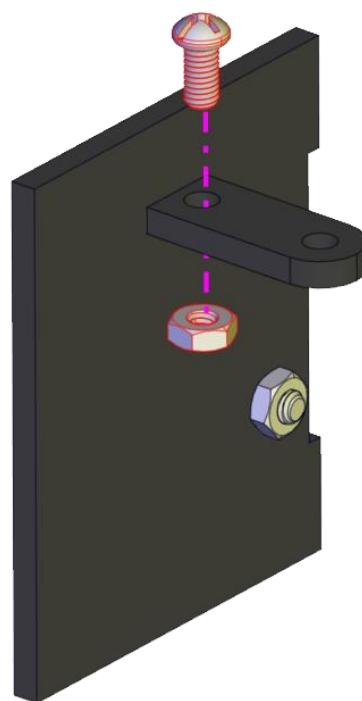
Step 2



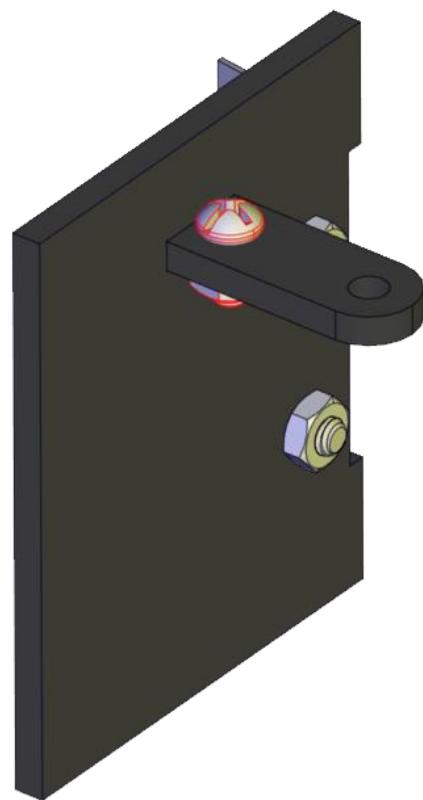
Step 2  
complete



Step 3

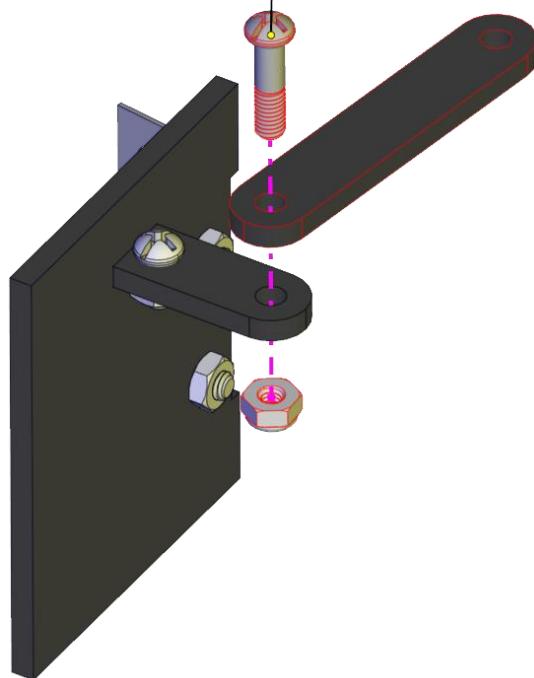


Step 3  
complete

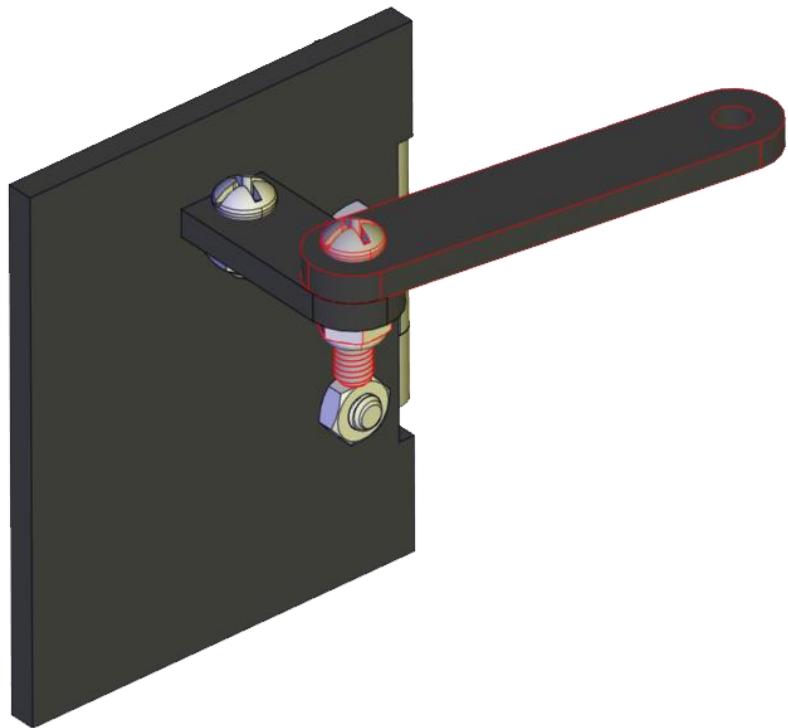


Step 4  
(The  
self-locking  
nut cannot  
be locked)

half tooth screw M3×12

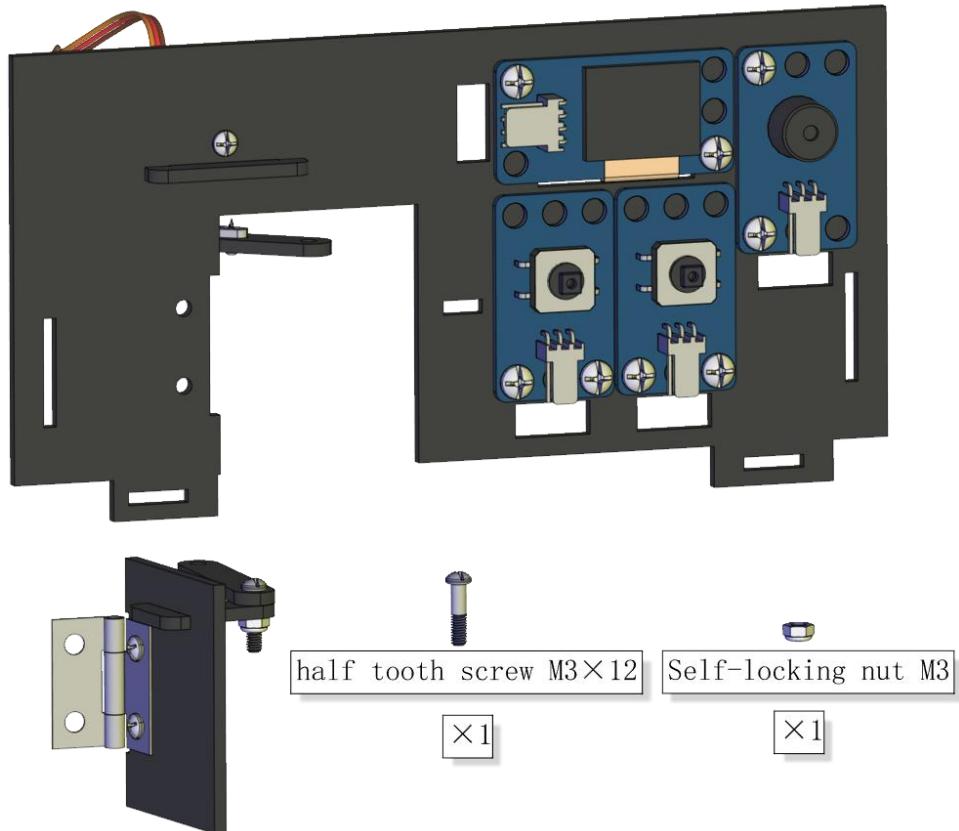


complete



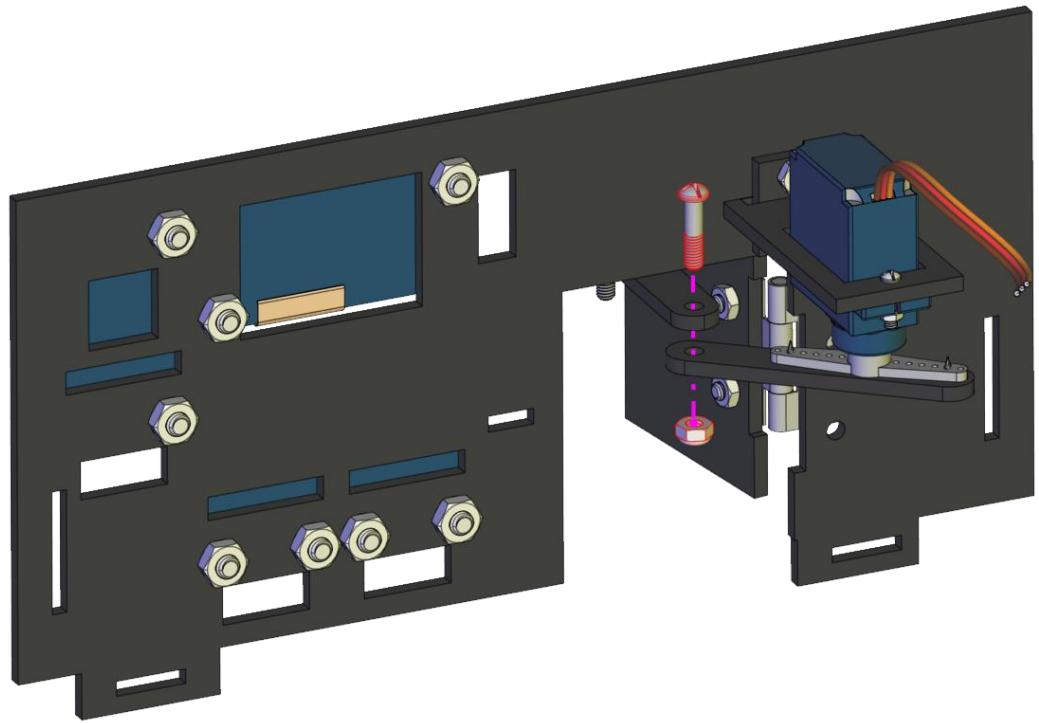
## Installation 19

Parts  
required  
for  
installati  
on

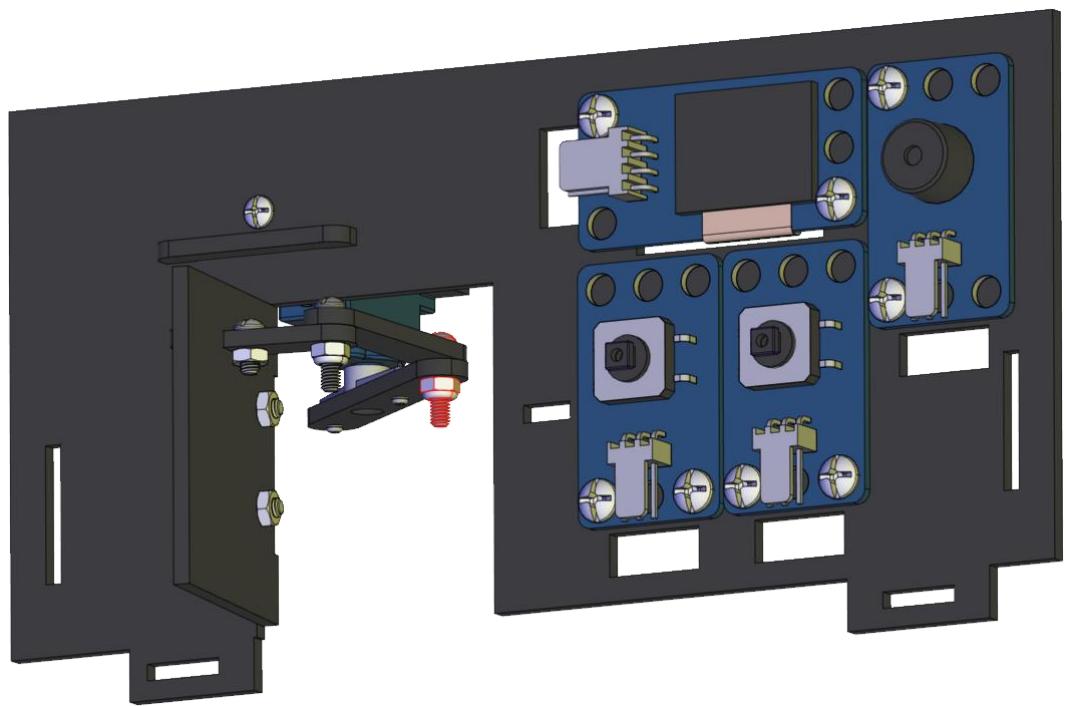


Install

(The  
self-locking  
nut cannot  
be locked)

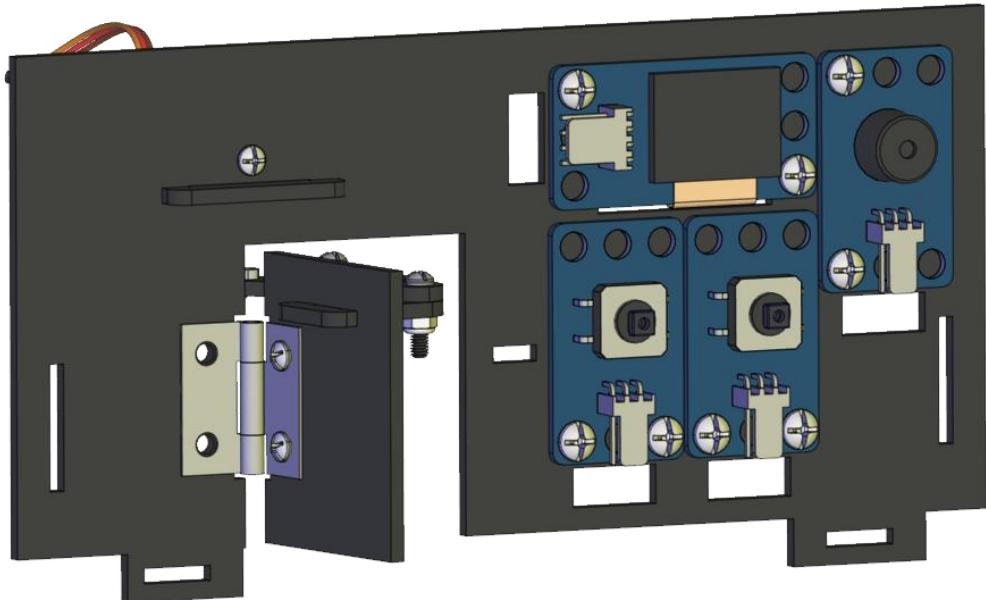


complete



## Installation 20

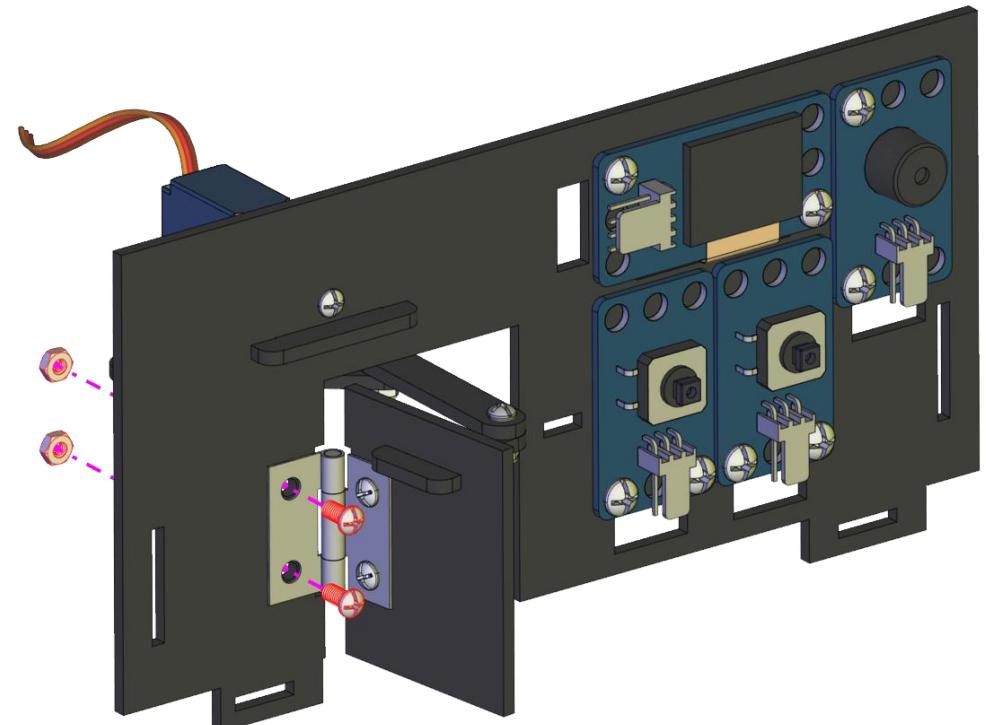
Parts  
required  
for  
installati  
on



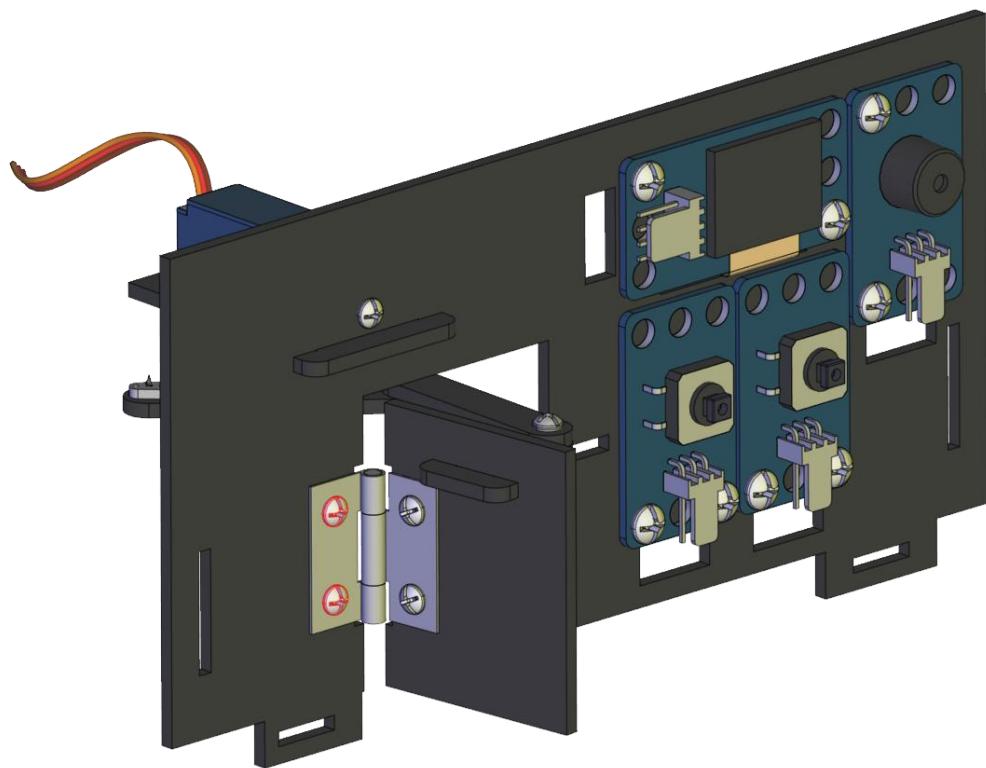
round head screw M3×6  
×2

nut M3  
×2

install

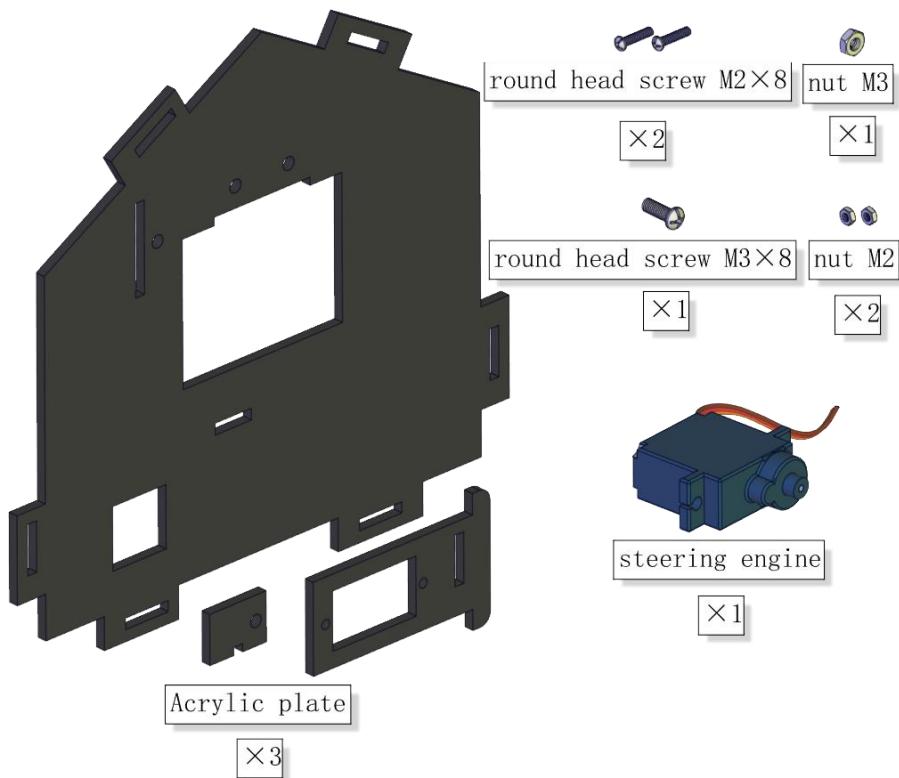


complete

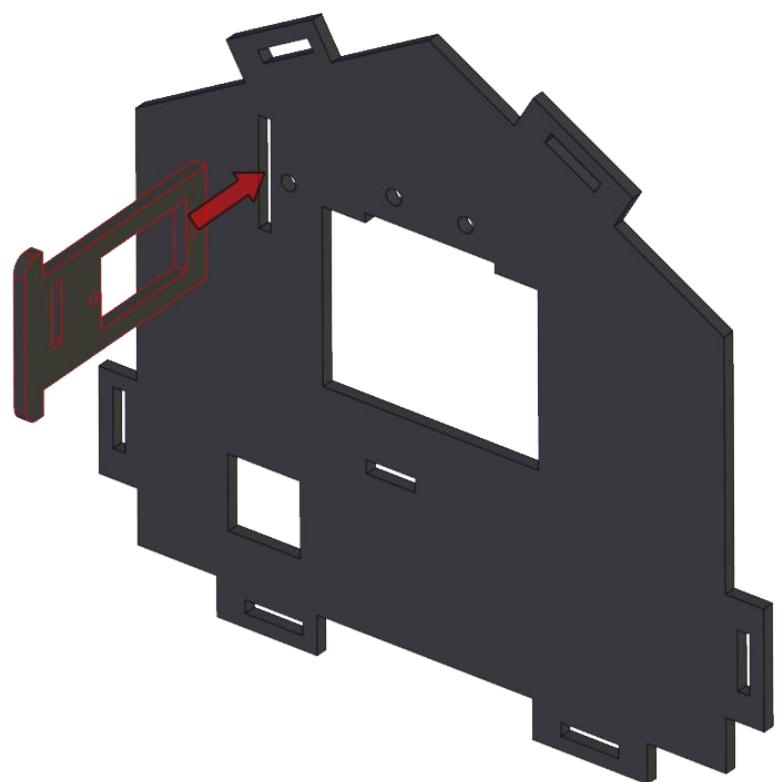


## Installation 21

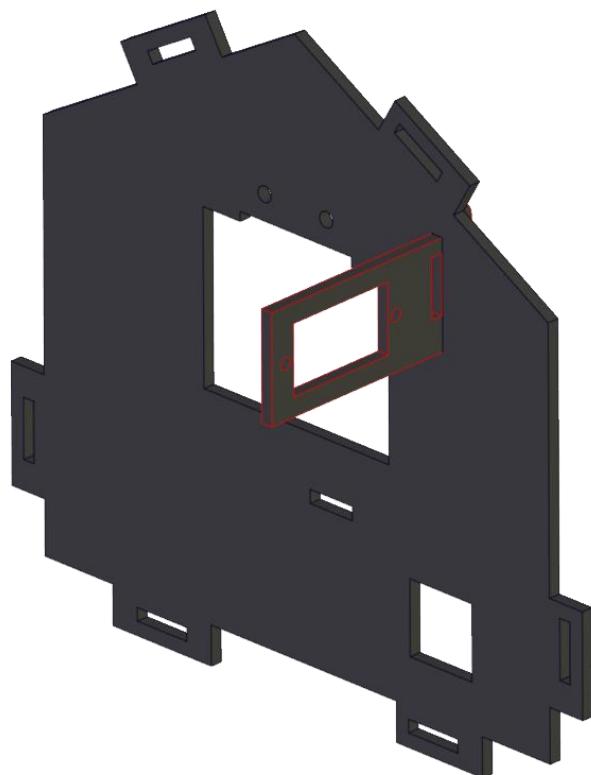
Parts  
required  
for  
installati  
on



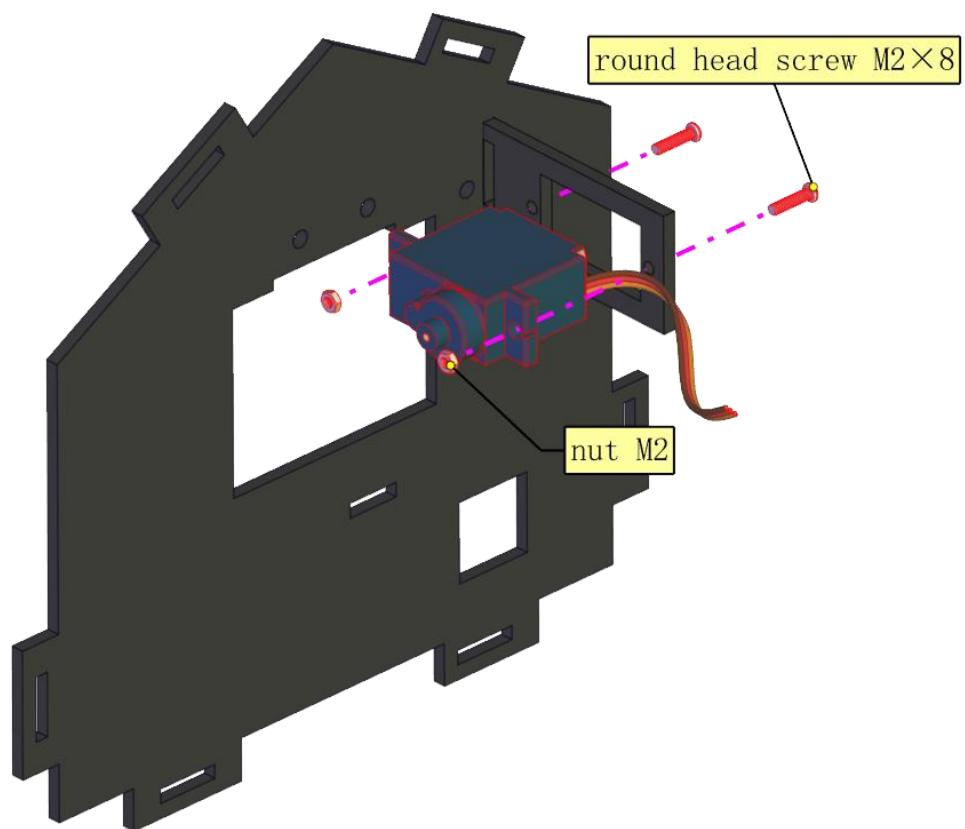
Step 1



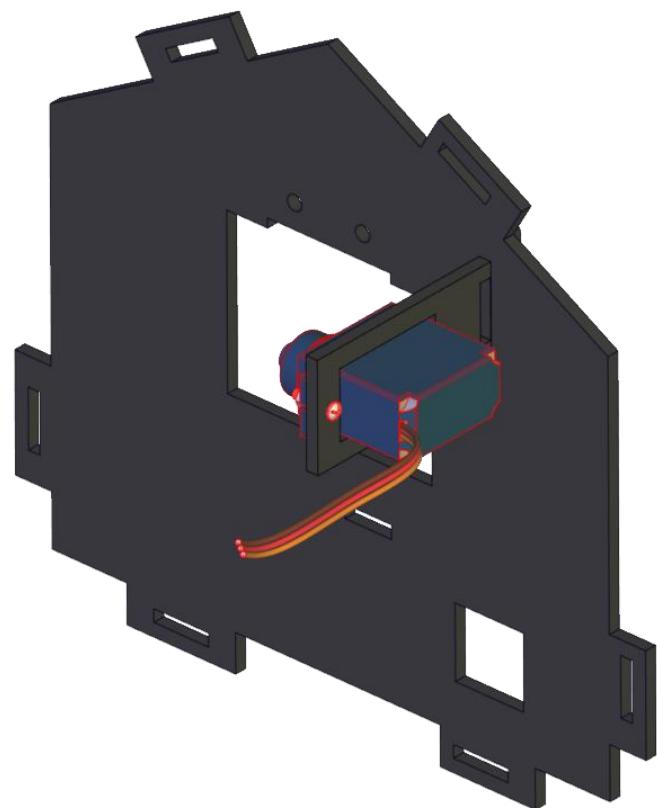
Step 1  
complete



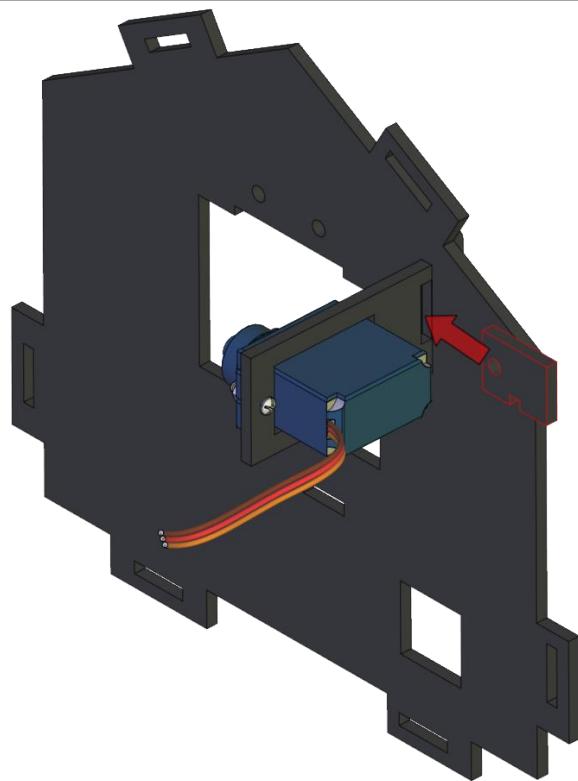
Step 2



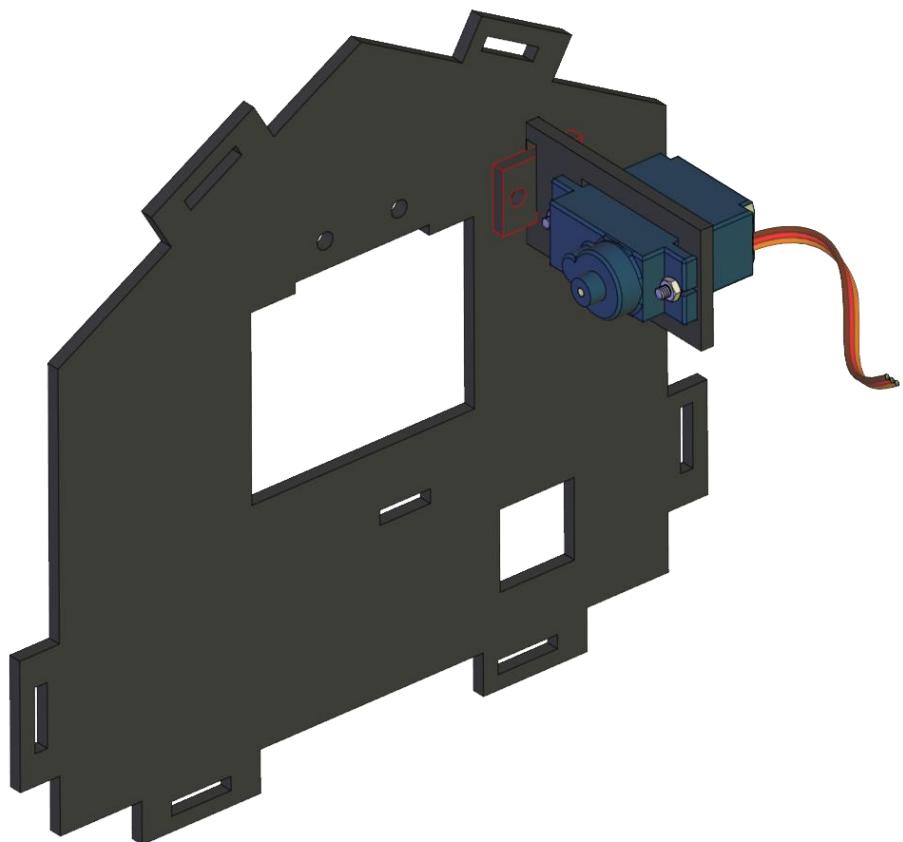
Step 2  
complete



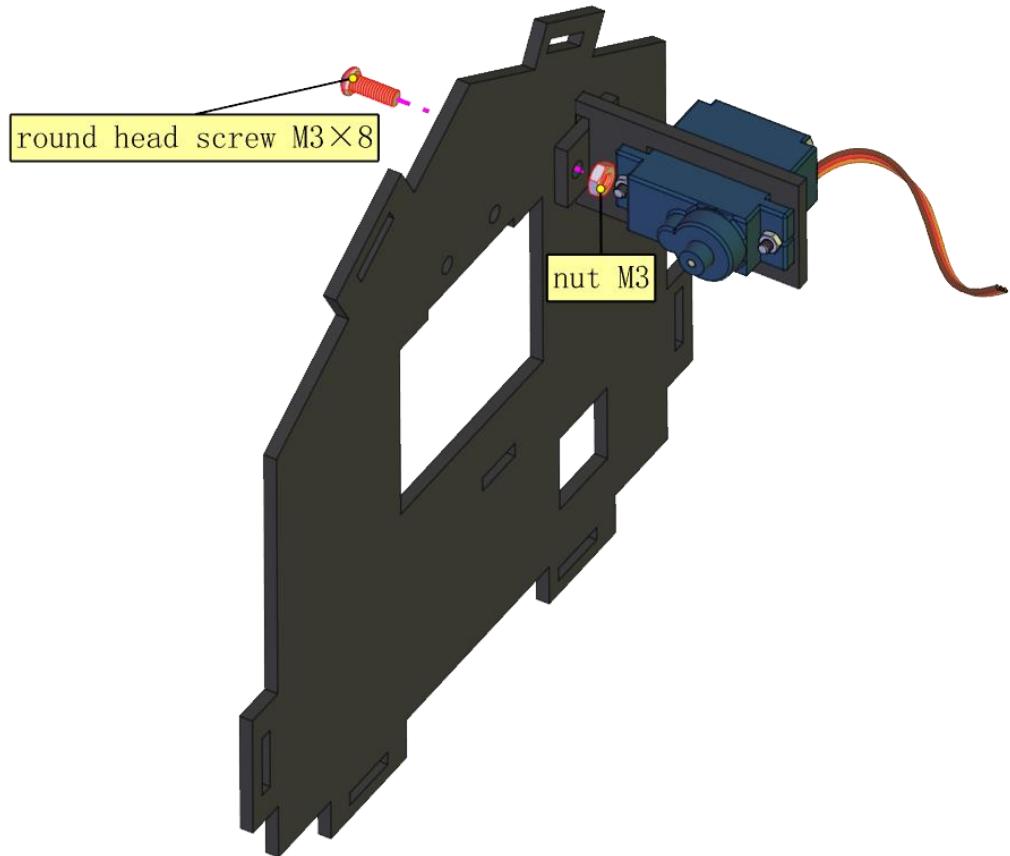
Step 3



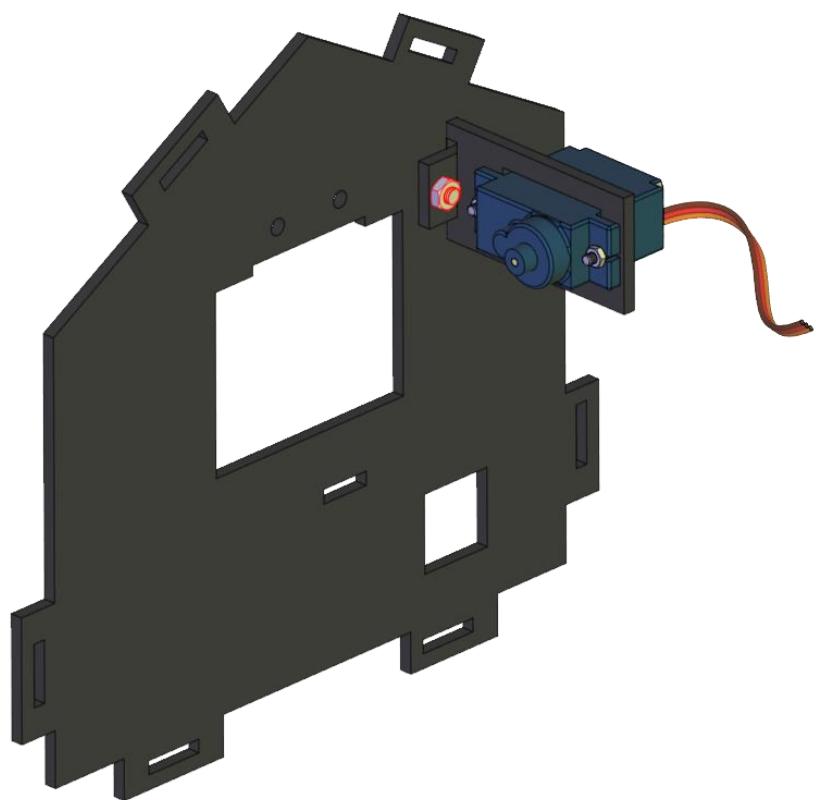
Step 3  
complete



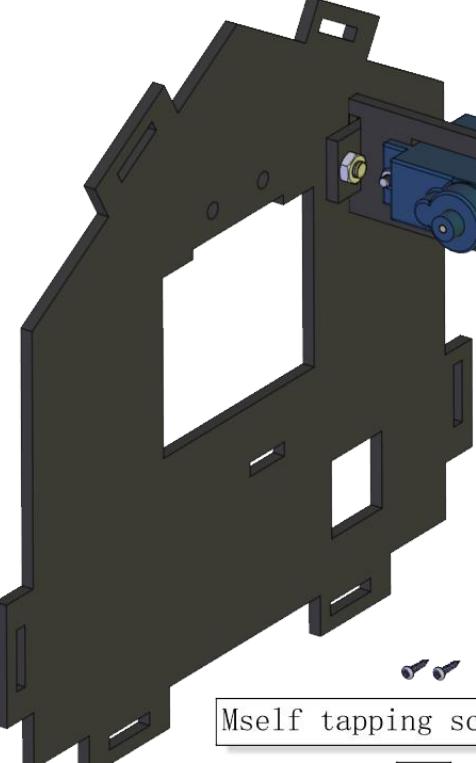
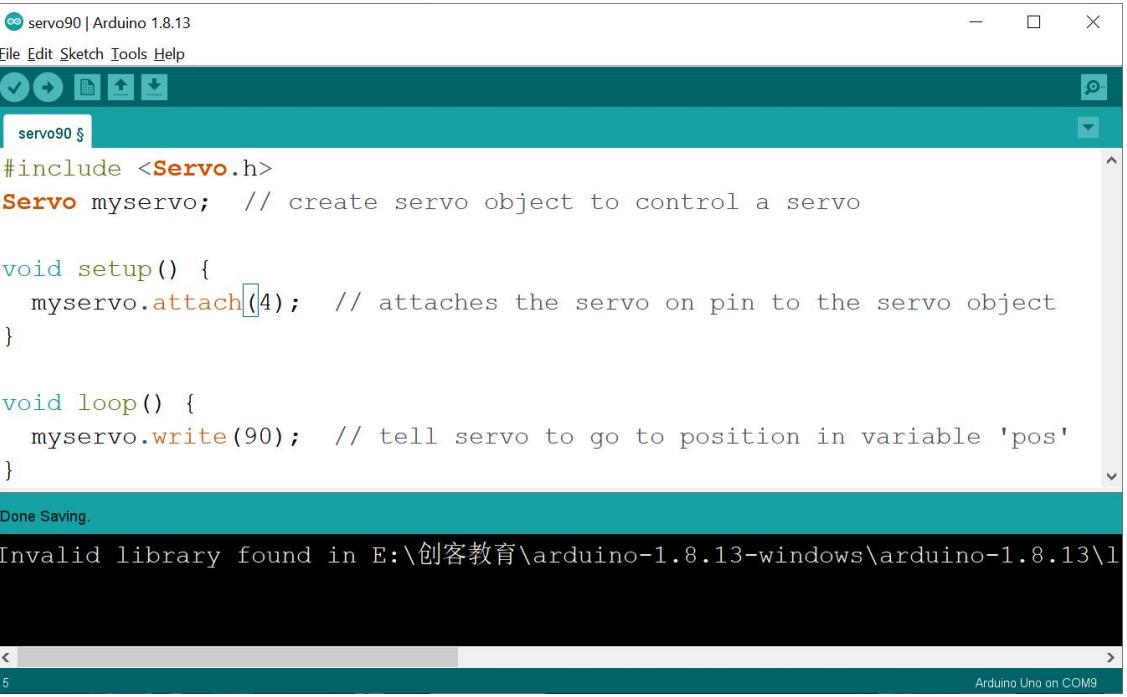
Step 4



complete



# Installation 22

Parts required for installation on	 <p>Acrylic plate X1</p> <p>rocker arm (Included in the steering gear) X1</p> <p>round head screw M2×4 (Included in the steering gear) X1</p> <p>Mself tapping screw 1.2×6 X2</p>
Write code before installation, and adjust the steering gear to 90 °	<p>Connect the arduino UNO to your computer with a data cable, edit the following code in the arduino IDE, and click Upload code.</p>  <pre>#include &lt;Servo.h&gt; Servo myservo; // create servo object to control a servo  void setup() {   myservo.attach(4); // attaches the servo on pin to the servo object }  void loop() {   myservo.write(90); // tell servo to go to position in variable 'pos' }  Done Saving. Invalid library found in E:\创客教育\arduino-1.8.13-windows\arduino-1.8.13\l</pre> <p>You can directly copy the following code:</p>

```

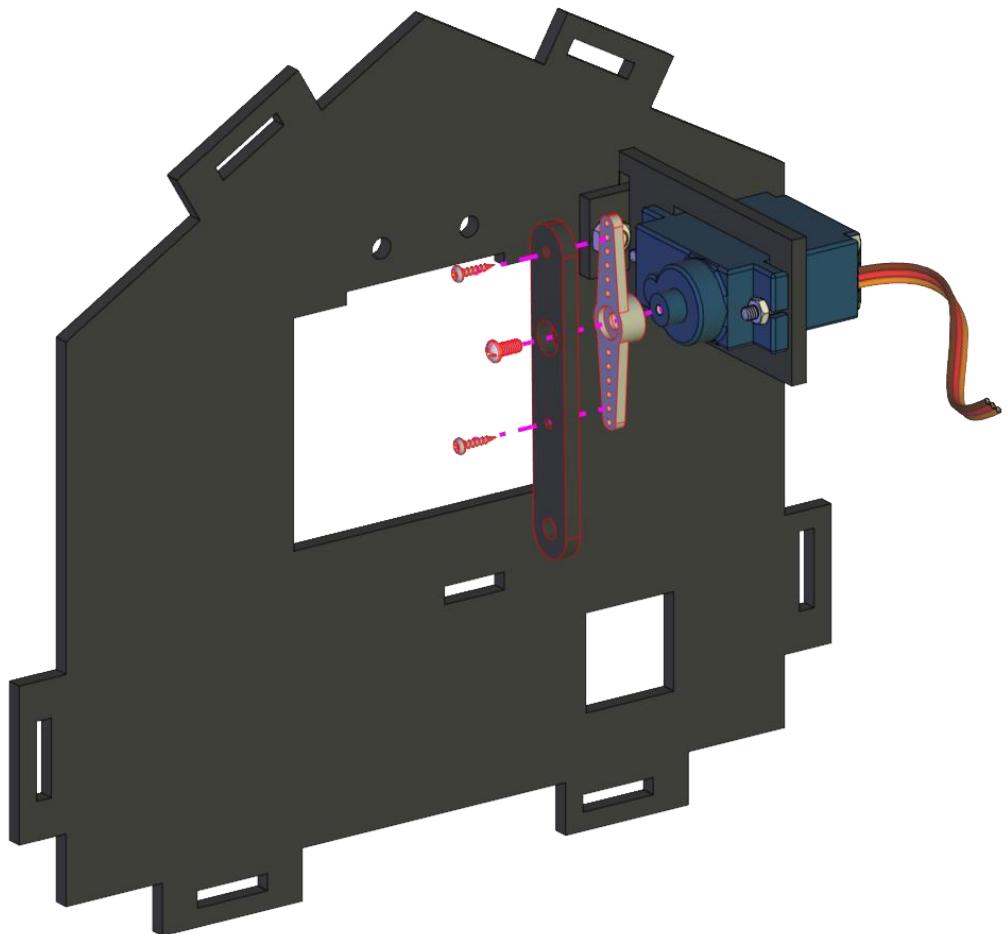
#include <Servo.h>
Servo myservo; // create servo object to control a servo

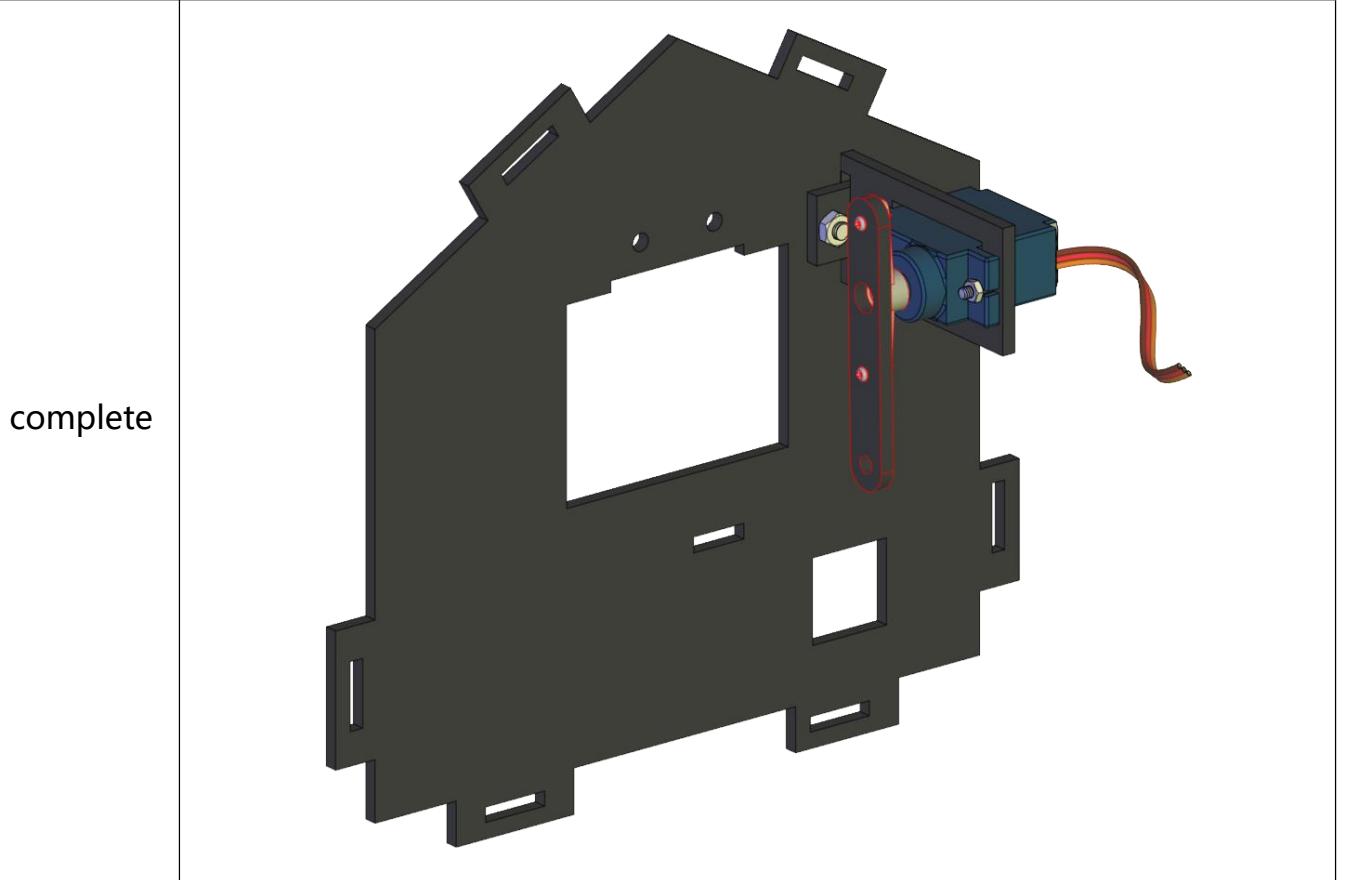
void setup() {
  myservo.attach(4); // attaches the servo on pin 4 to the servo object
}

void loop() {
  myservo.write(90); // tell servo to go to position in variable 'pos'
}

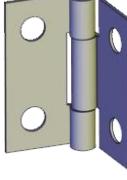
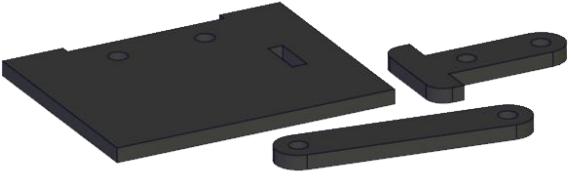
```

Install  
 (The  
 installation  
 angle shall  
 be  
 consistent  
 with the  
 figure)

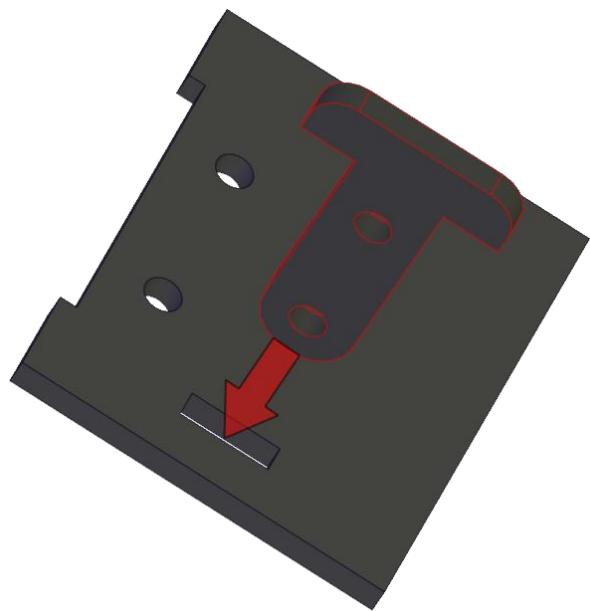




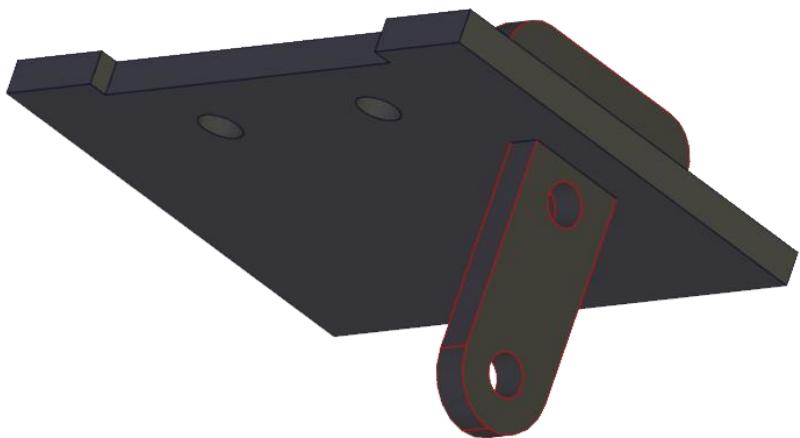
## Installation 23

Parts required for installation	 hinge ×1	 Acrylic plate ×3		
	 round head screw M3×6 ×3	 nut M3 ×3	 half tooth screw M3×12 ×1	 Self-locking nut M3 ×1

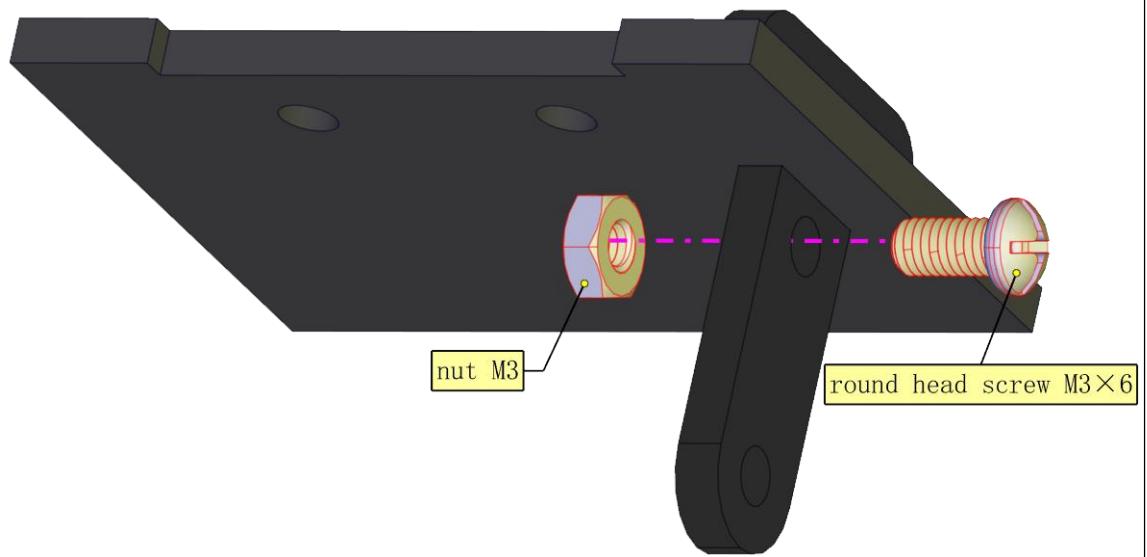
Step 1

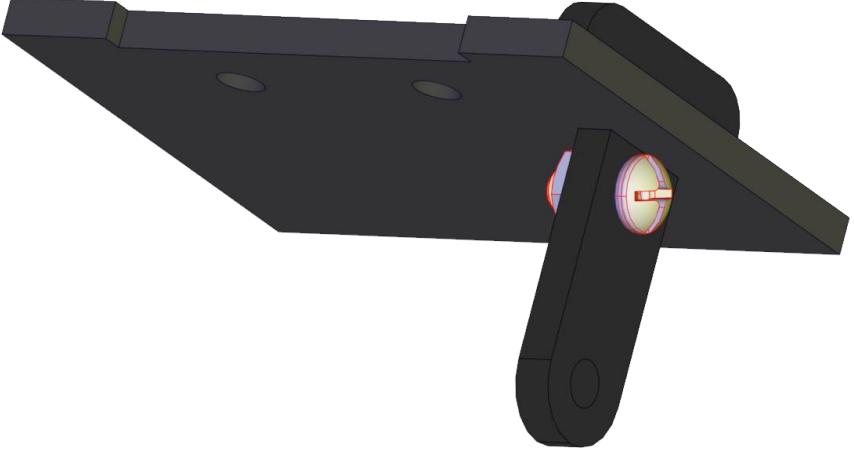
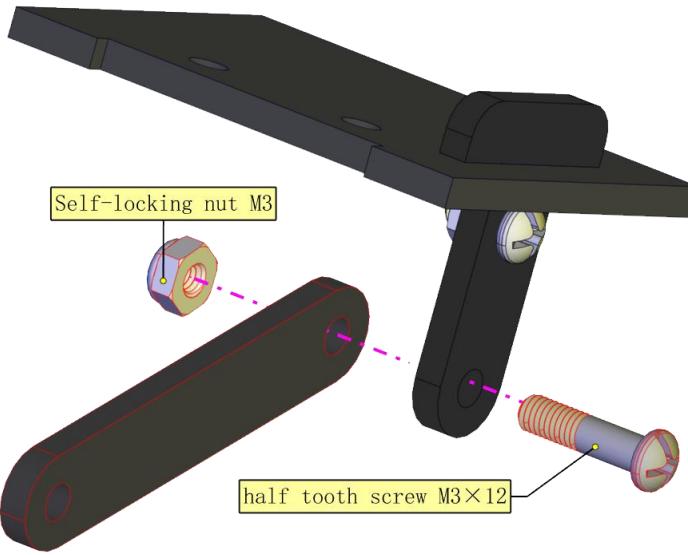
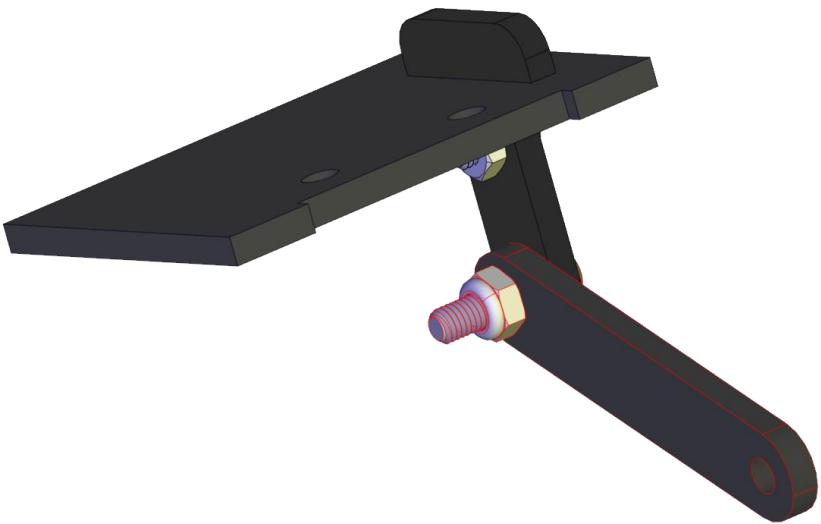


Step 1  
complete

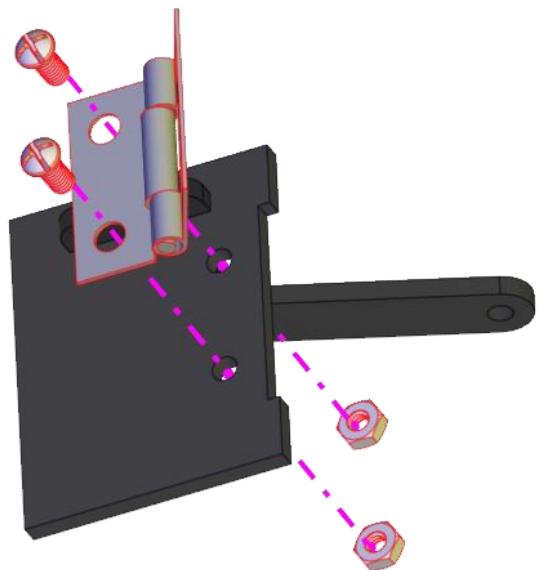


Step 2

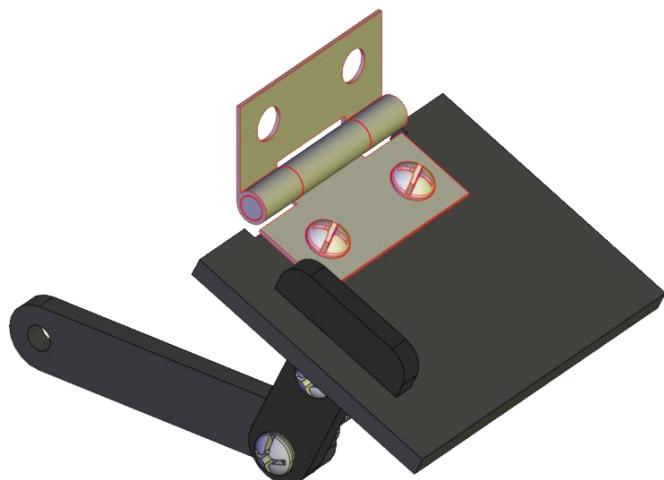


Step 2 complete	
<p>Step 3 (The self-locking nut cannot be locked)</p>	 <p>You need to use a wrench to jam the self-locking nut. We have provided two spanners cut from acrylic.</p>
Step 3 complete	

Step 4

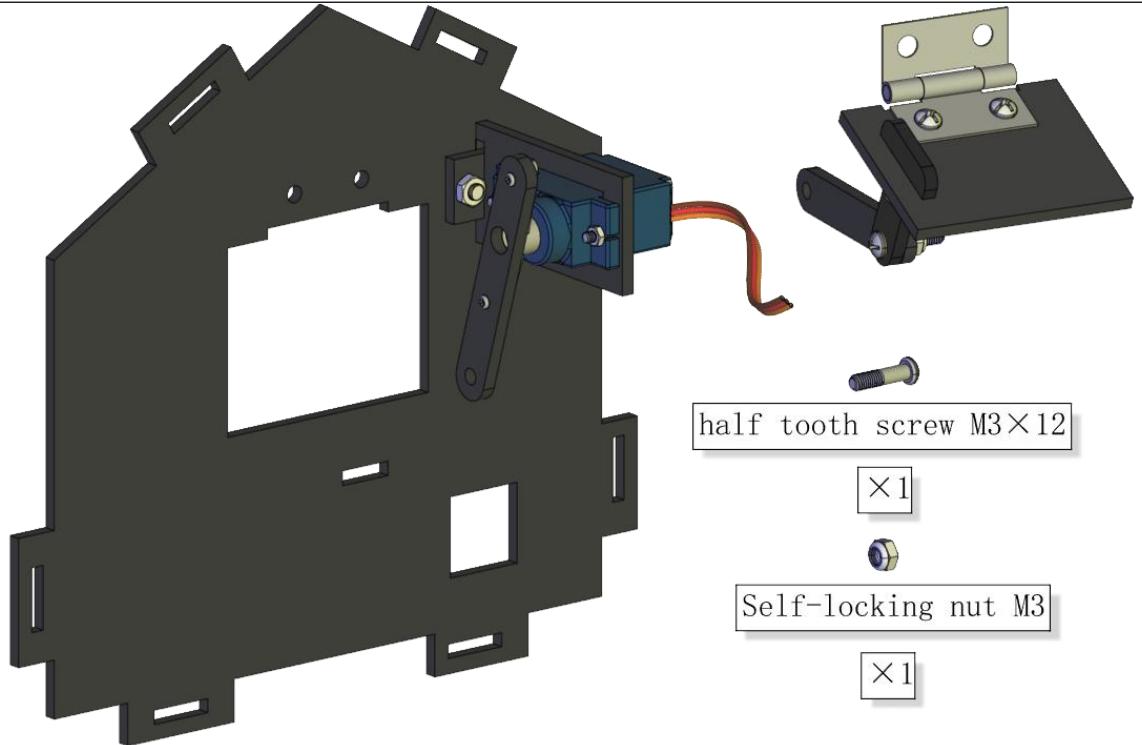


complete

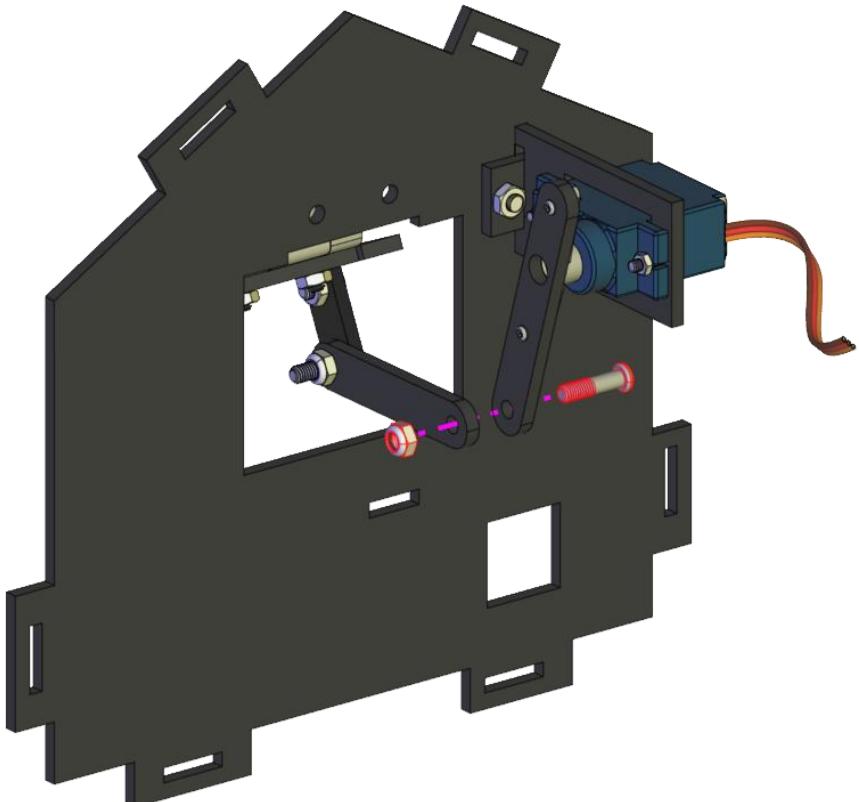


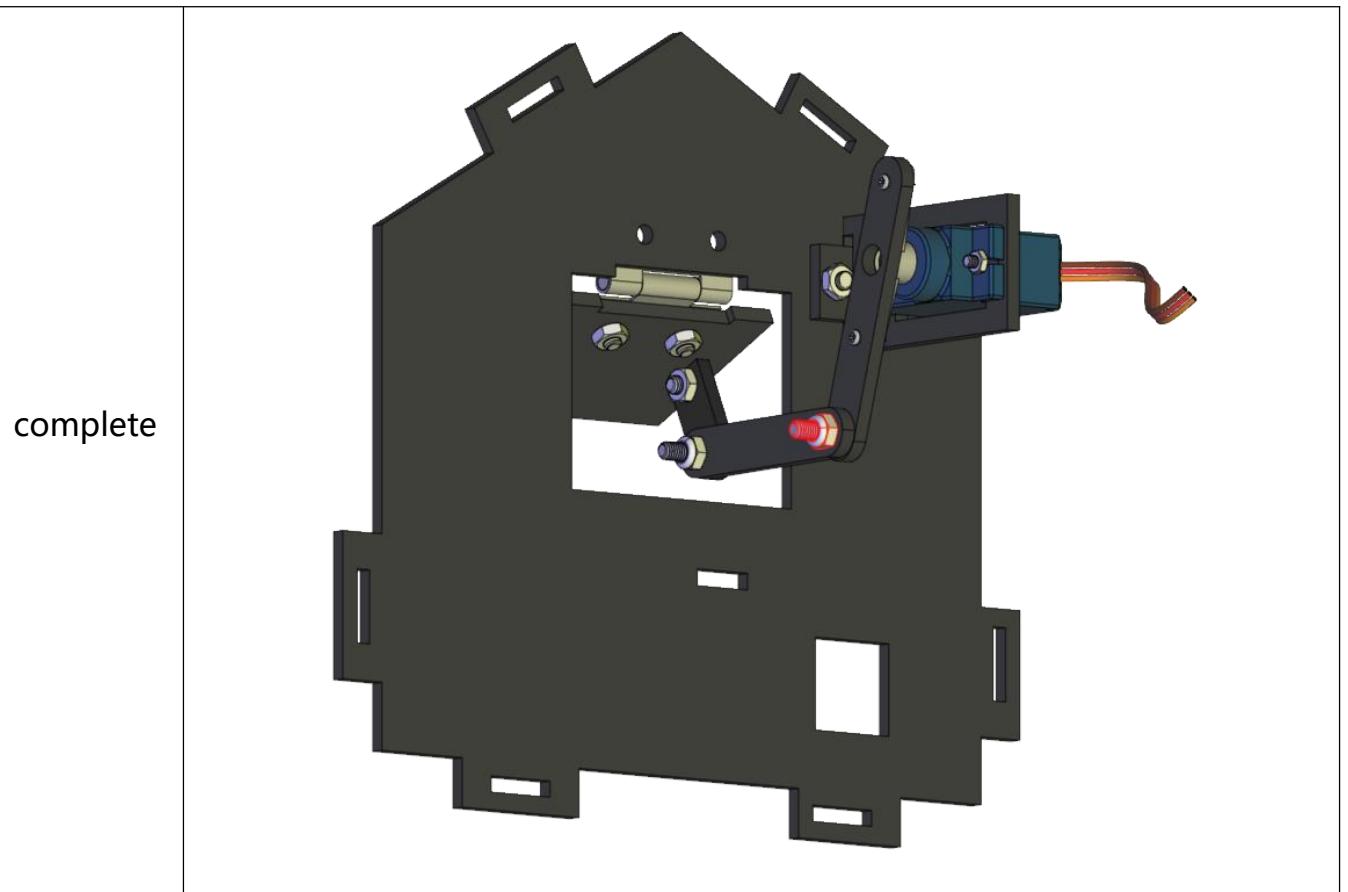
## Installation 24

Parts  
required  
for  
installati  
on



install  
  
(The  
self-locking  
nut cannot  
be locked)





## Installation 25

Parts  
required  
for  
installati  
on



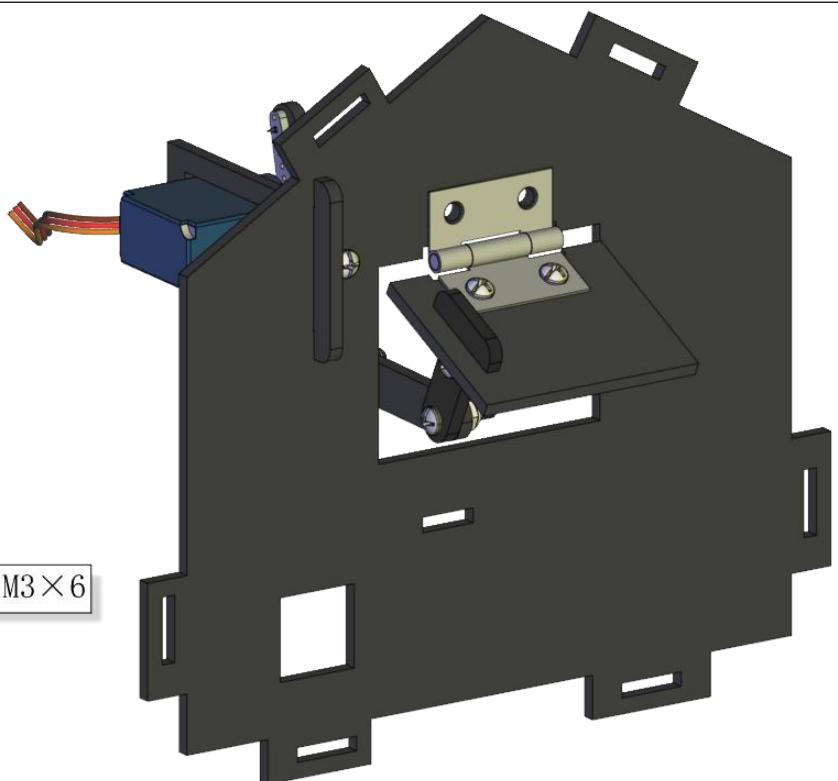
nut M3

×2

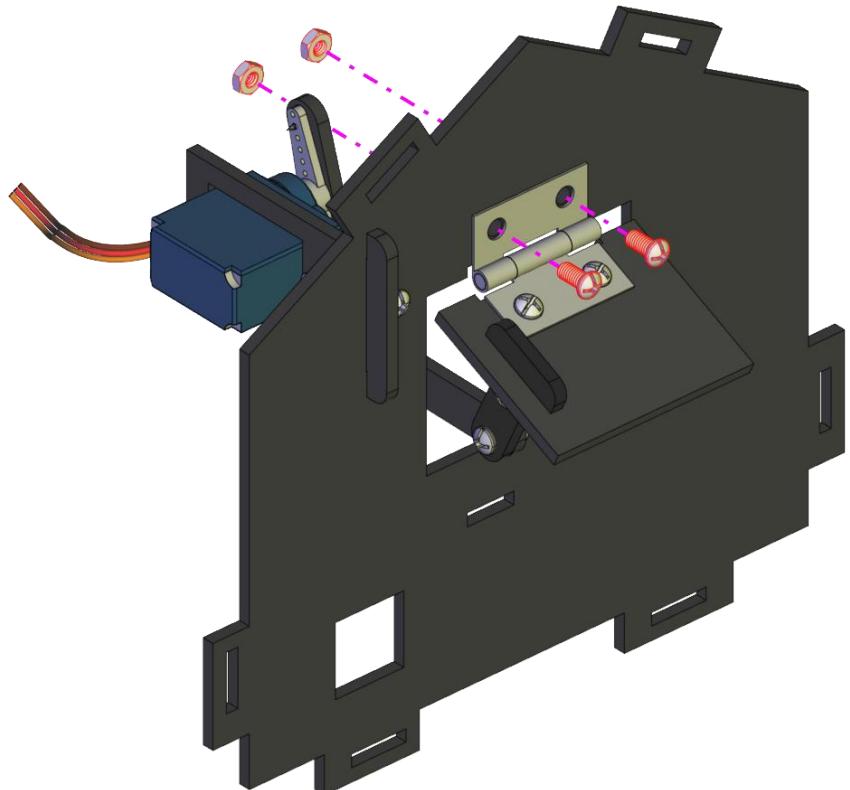


round head screw M3×6

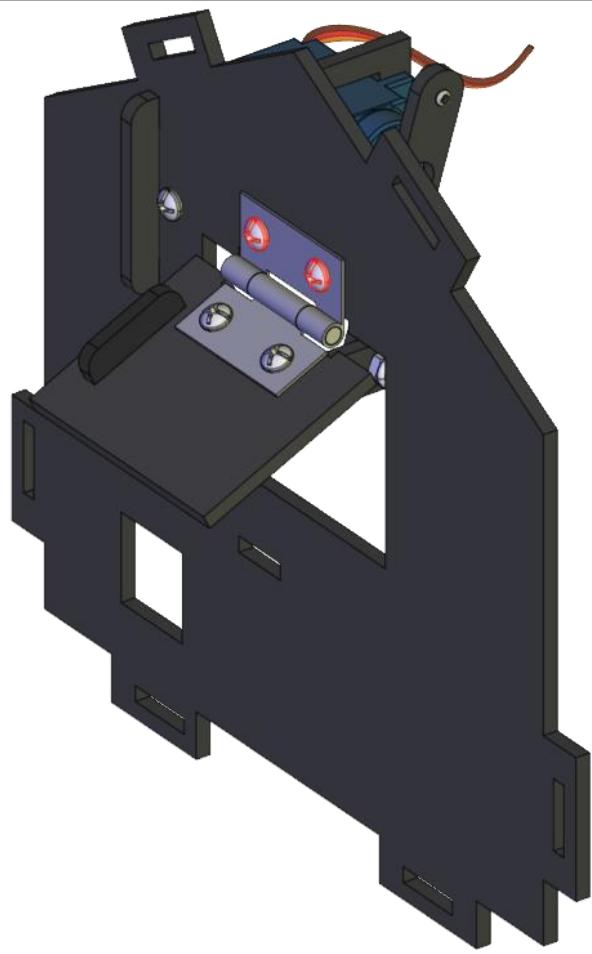
×2



install

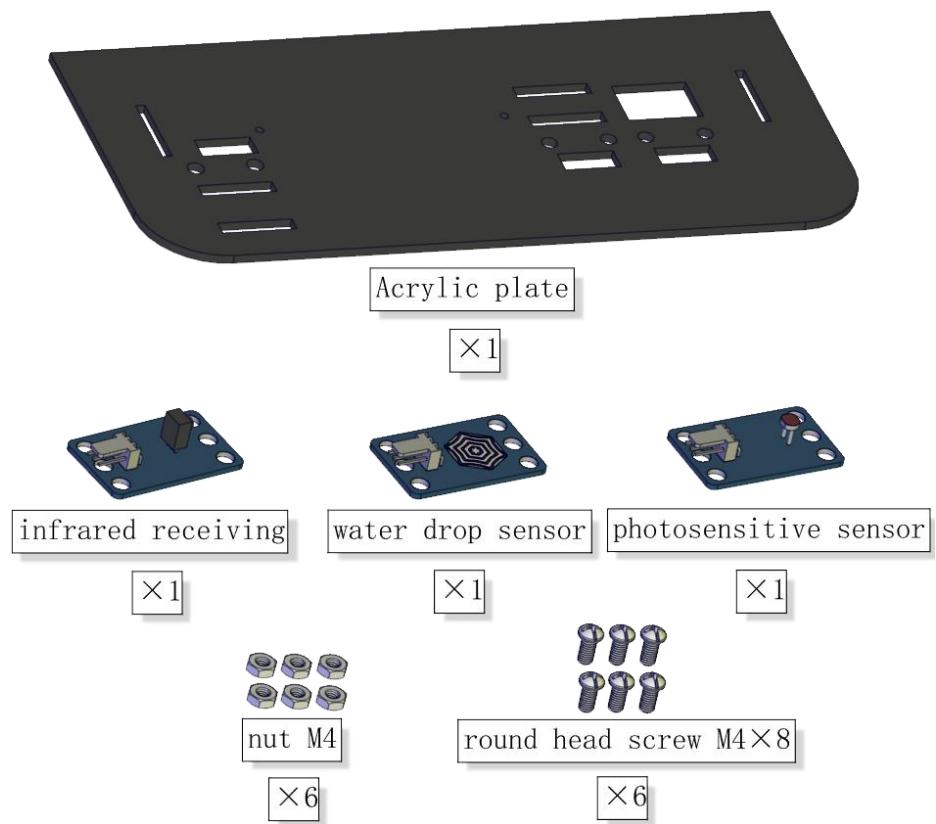


complete

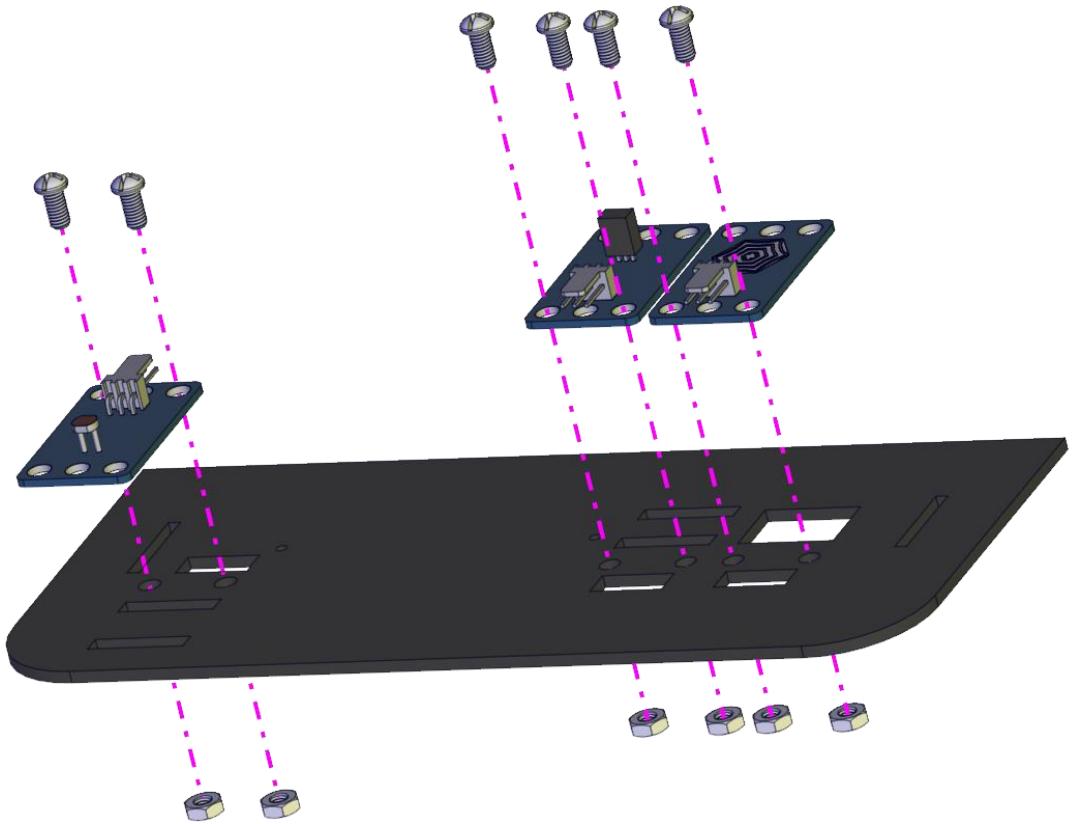


## Installation 26

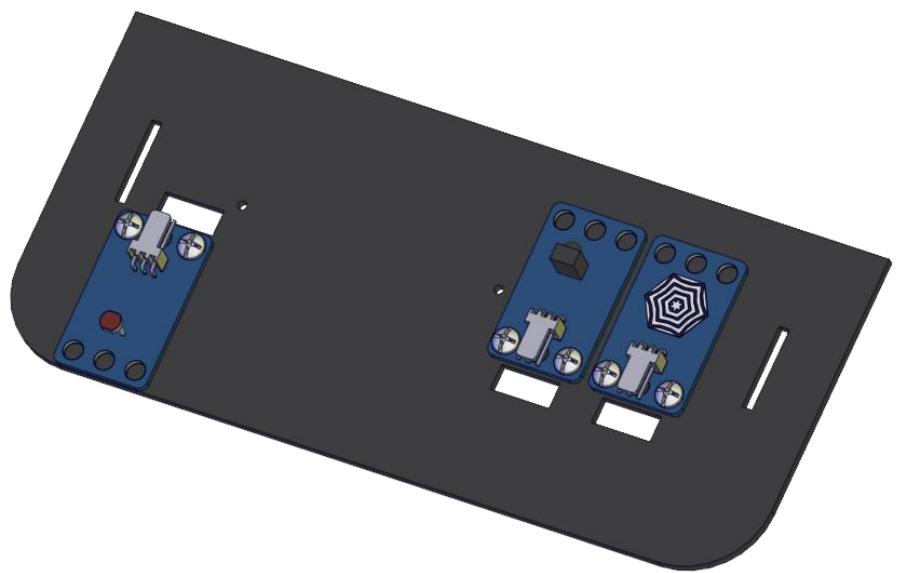
Parts  
required  
for  
installati  
on



install

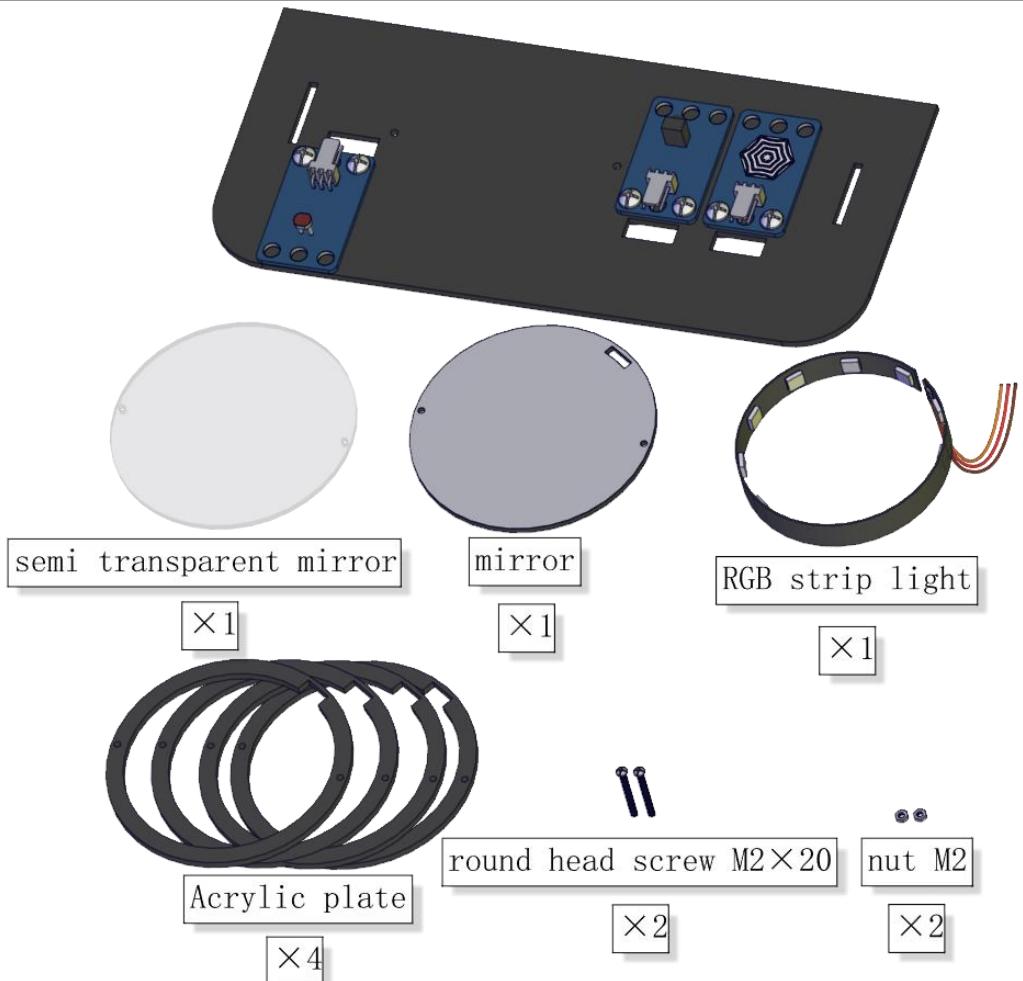


complete

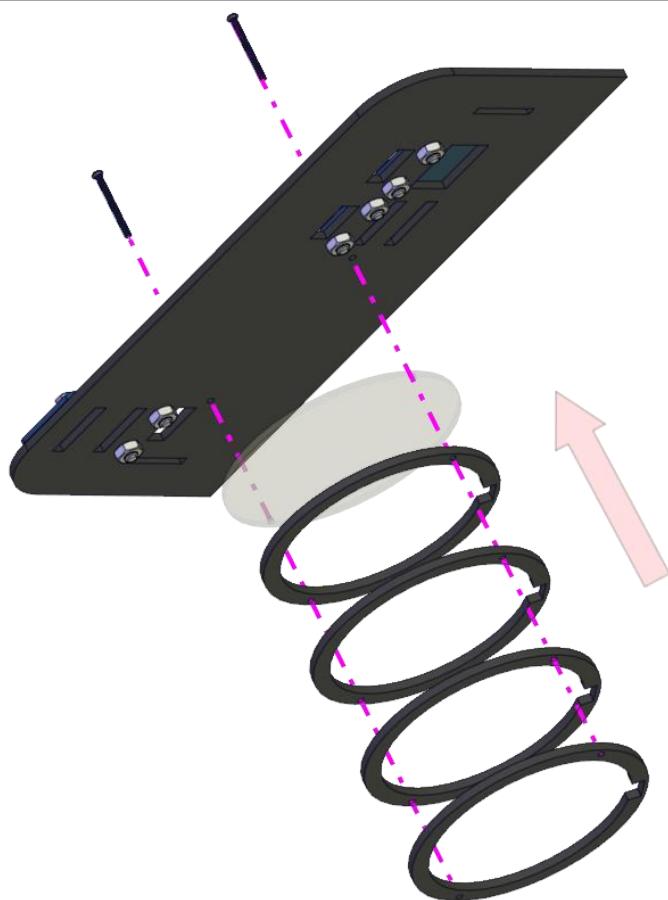


## Installation 27

Parts required for installation  
(The protective film of the lens needs to be removed)



Step 1



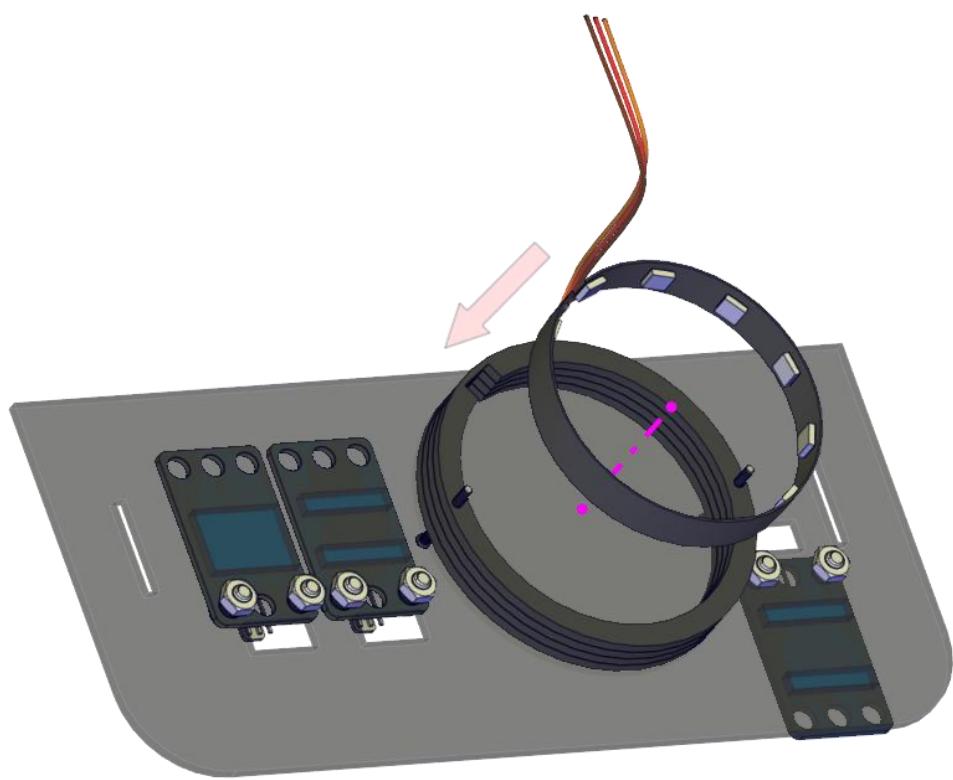
**Note:** The installation direction should be consistent with the figure below.

Step 1  
complete



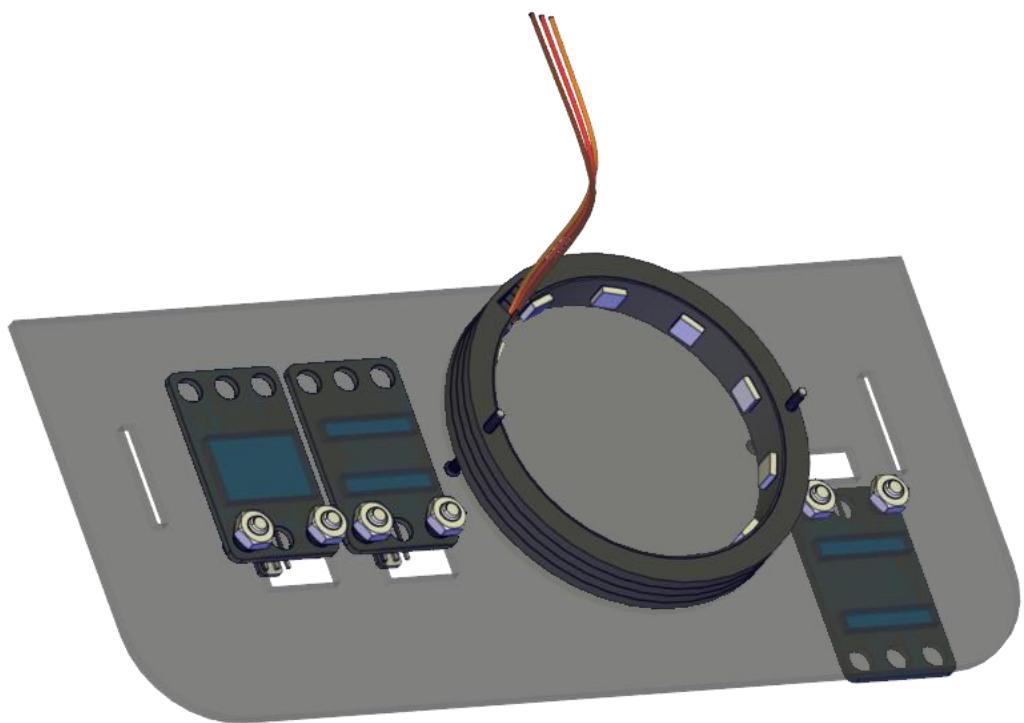
Step 2

(Paste  
the light  
strip on  
the ring  
wall)

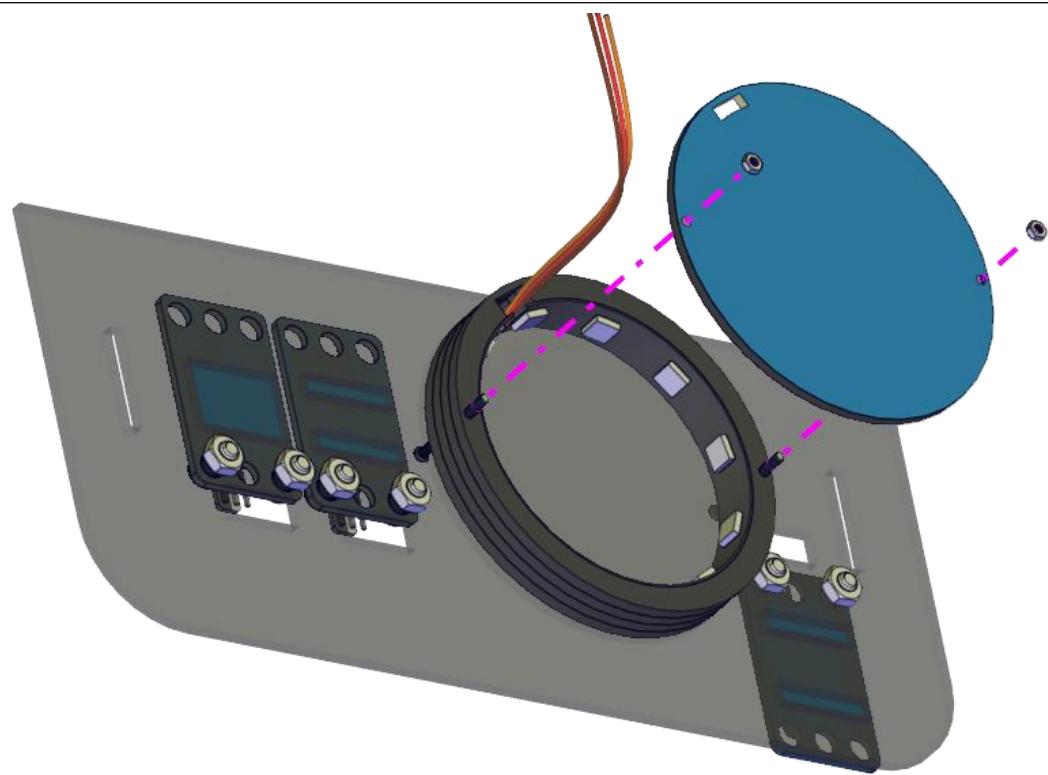


Step 2

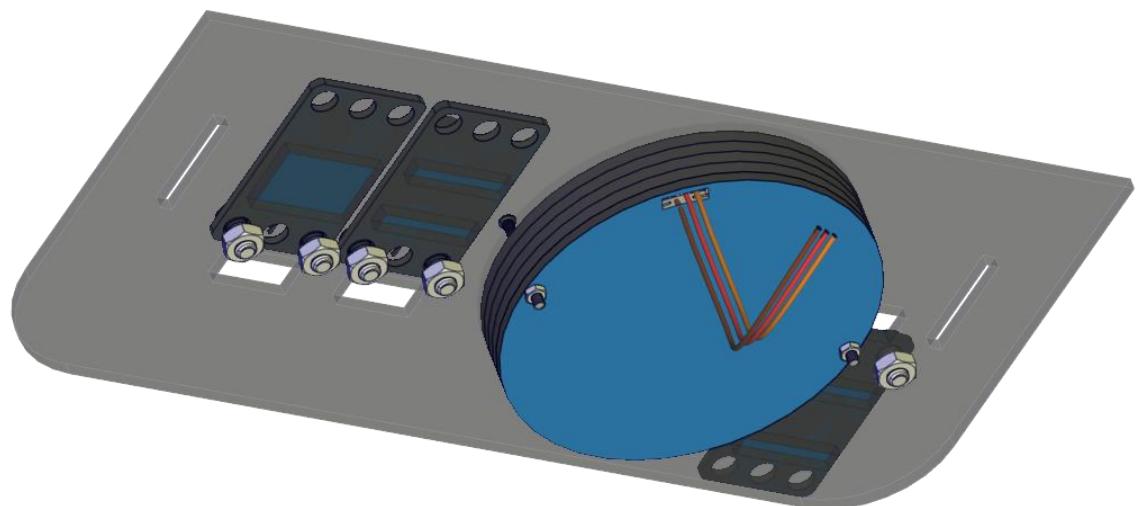
complete



Step 3



complete



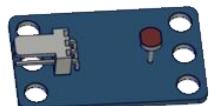
## Installation 28

Parts  
required  
for  
installati  
on



Acrylic plate

×1



photosensitive sensor

×1



round head screw M4×8

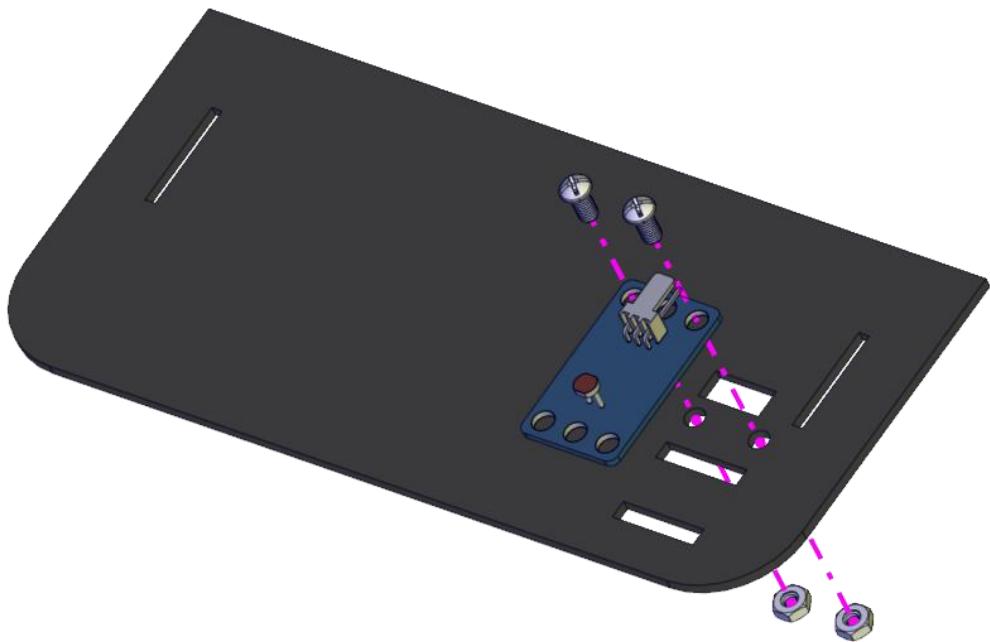
×2



nut M4

×2

install

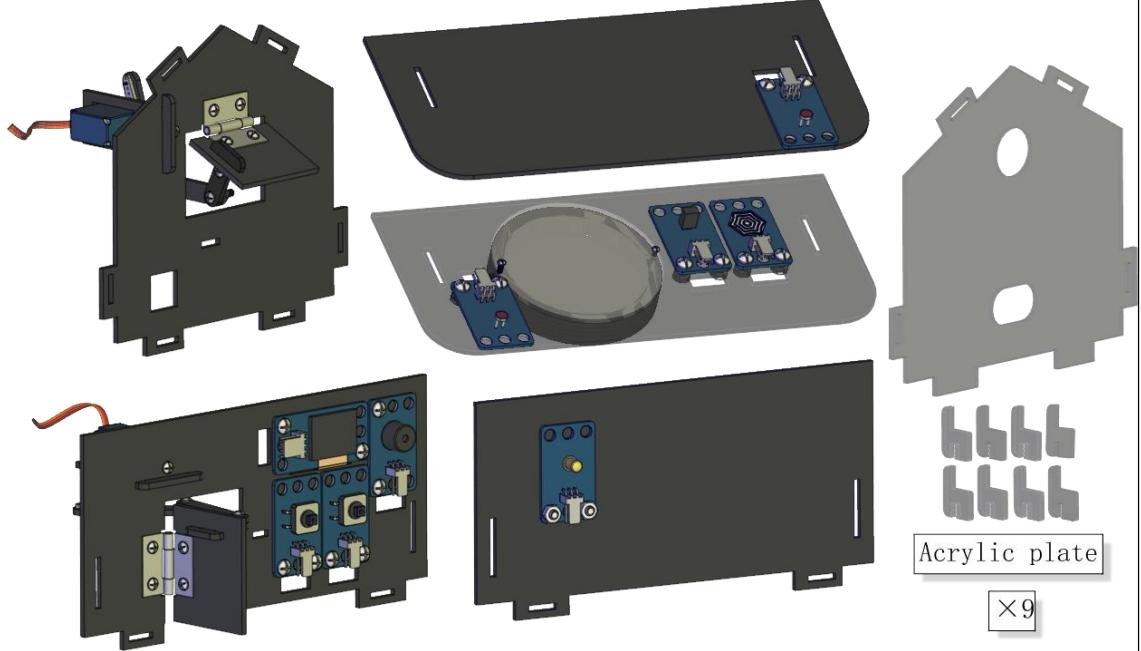


complete

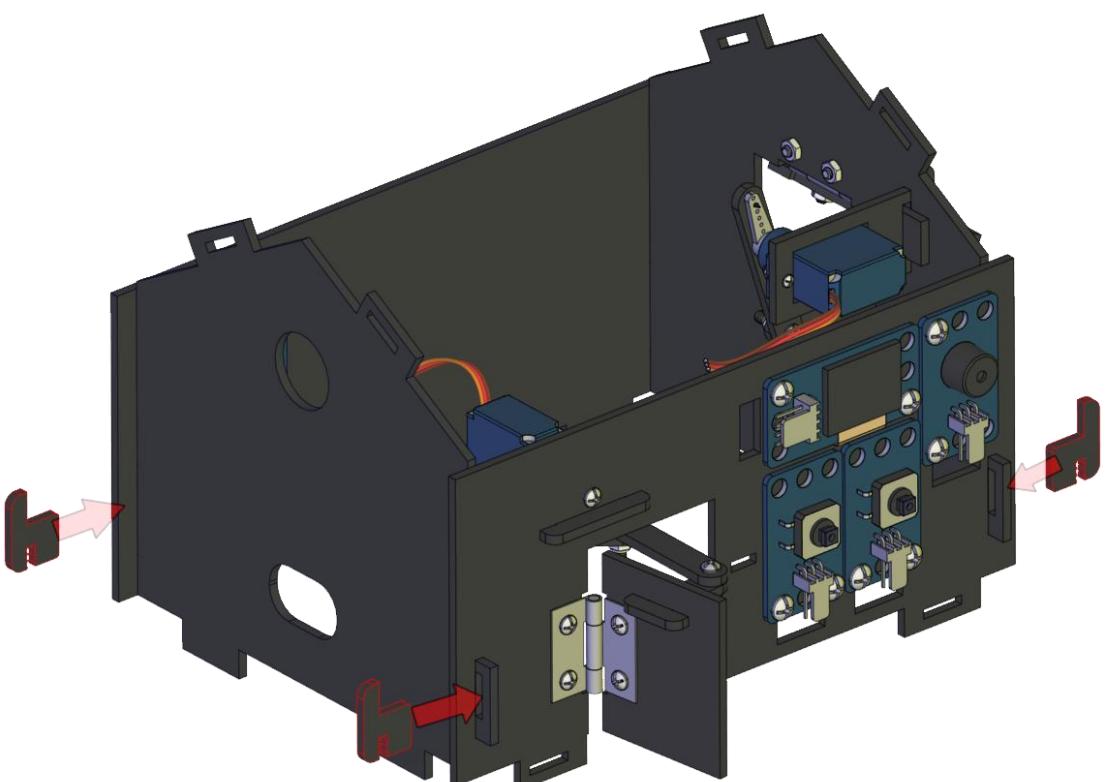


## Installation 29

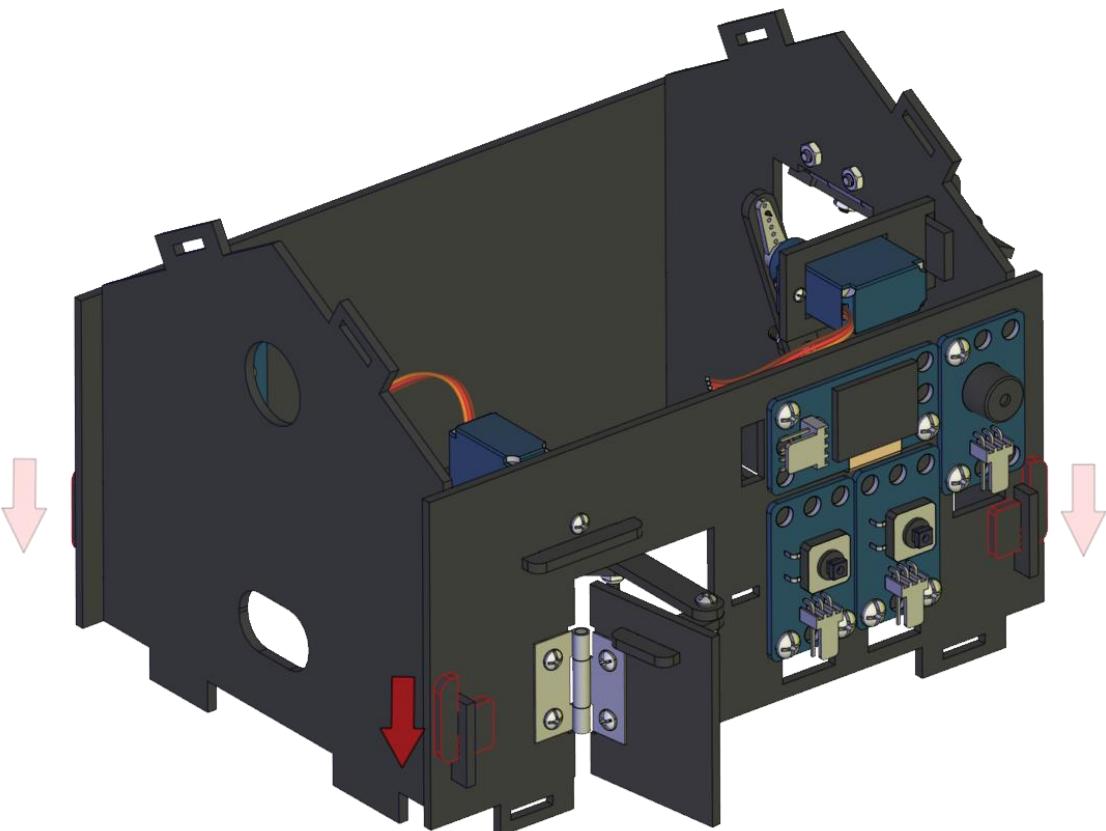
Parts  
required  
for  
installati  
on



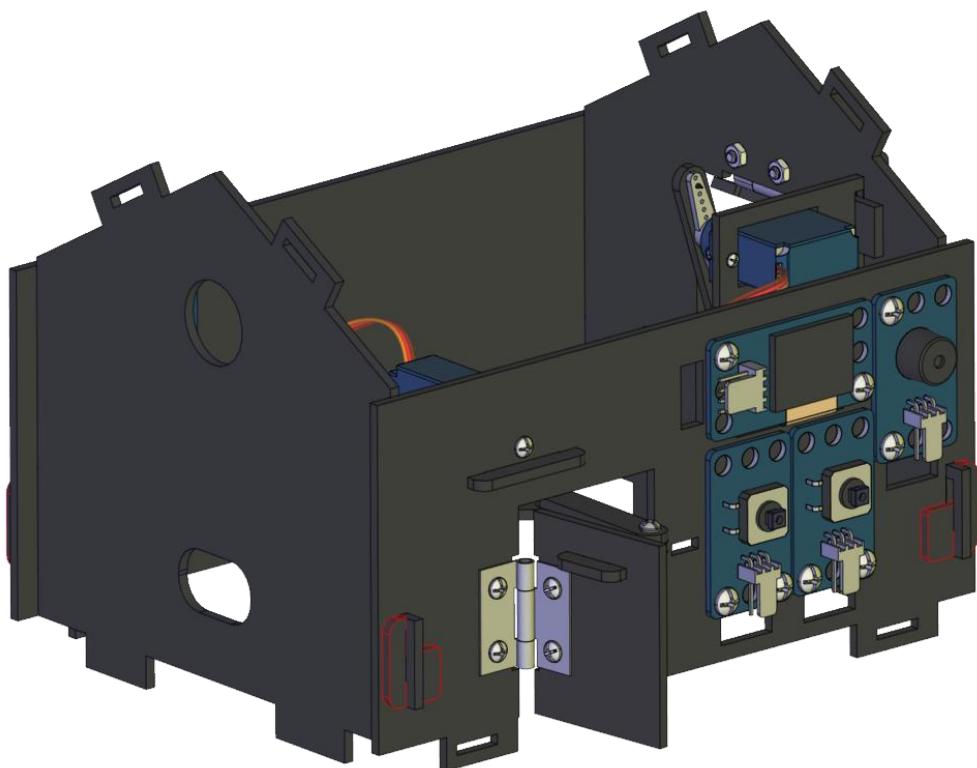
Step 1



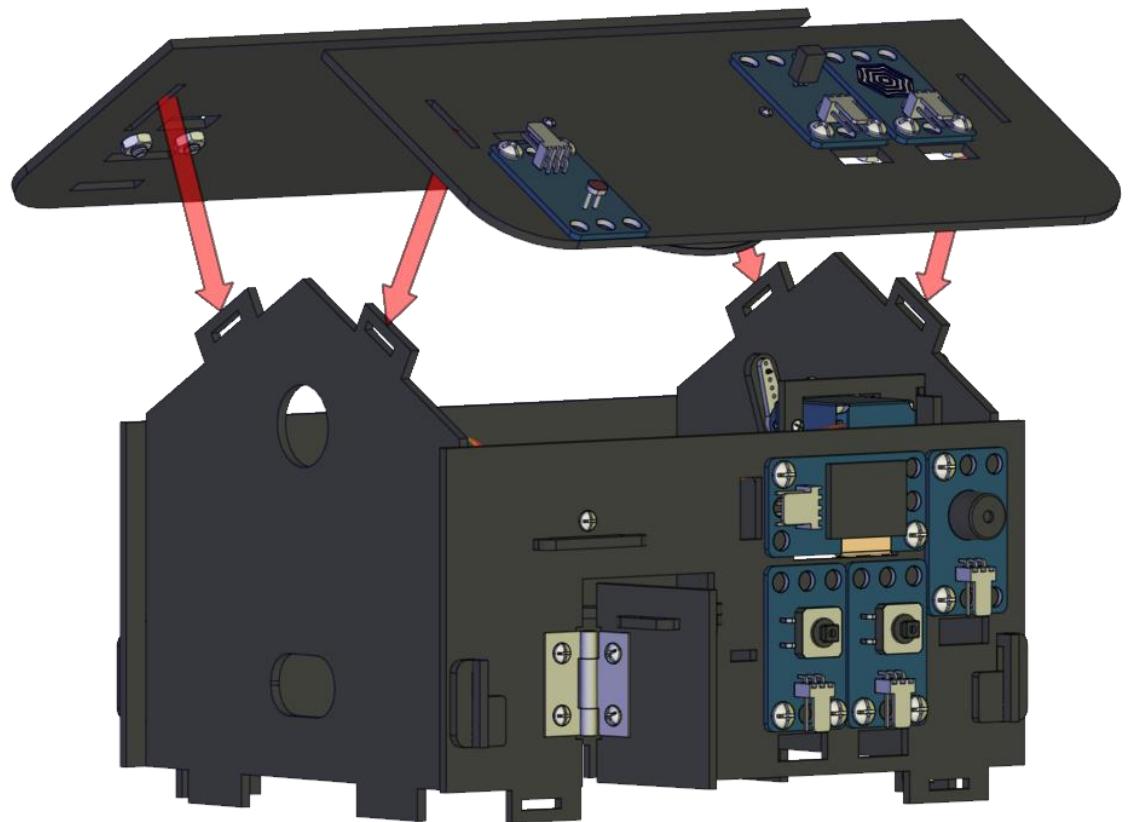
Step 2



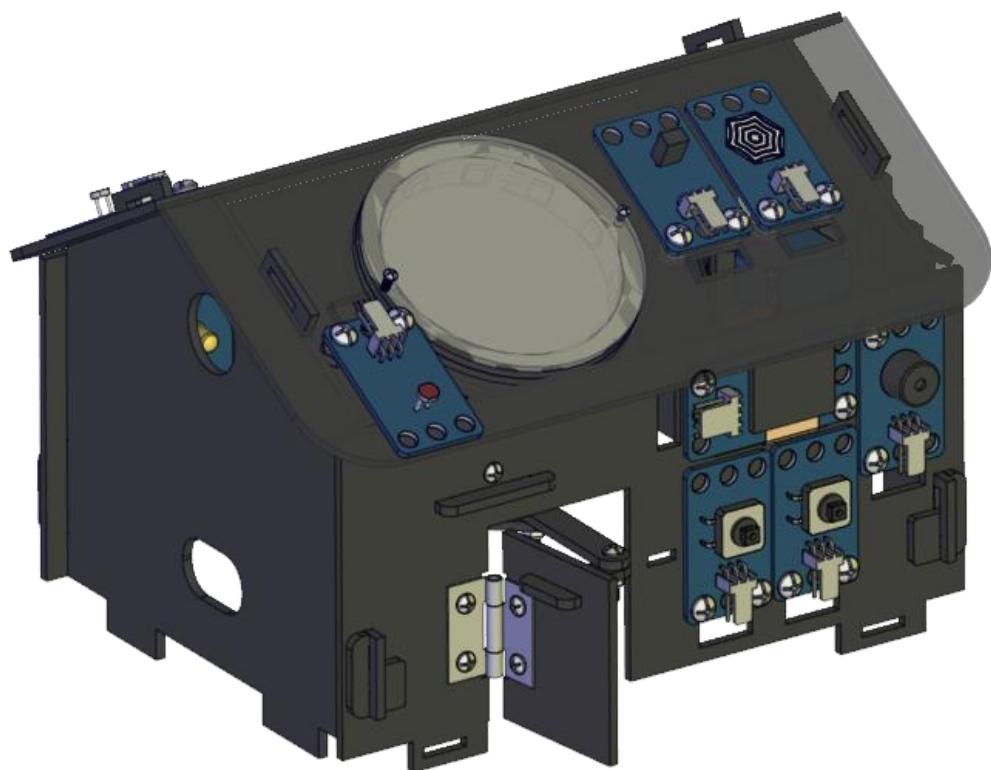
Step 2  
complete



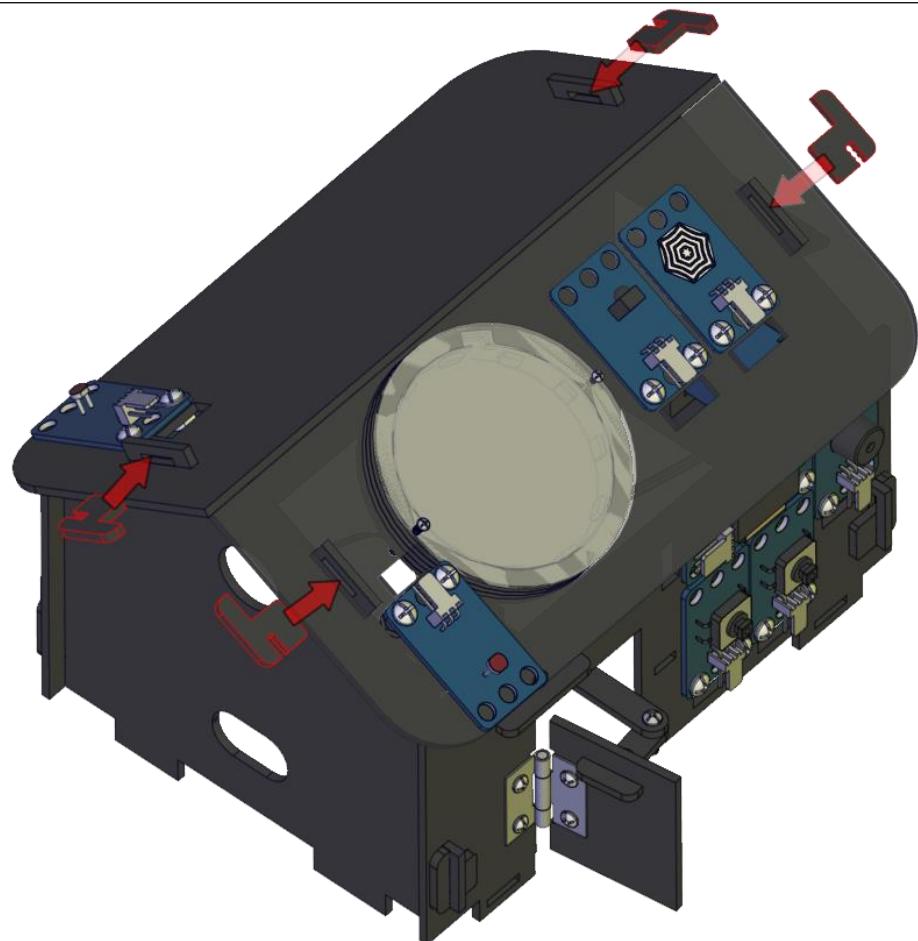
Step 3



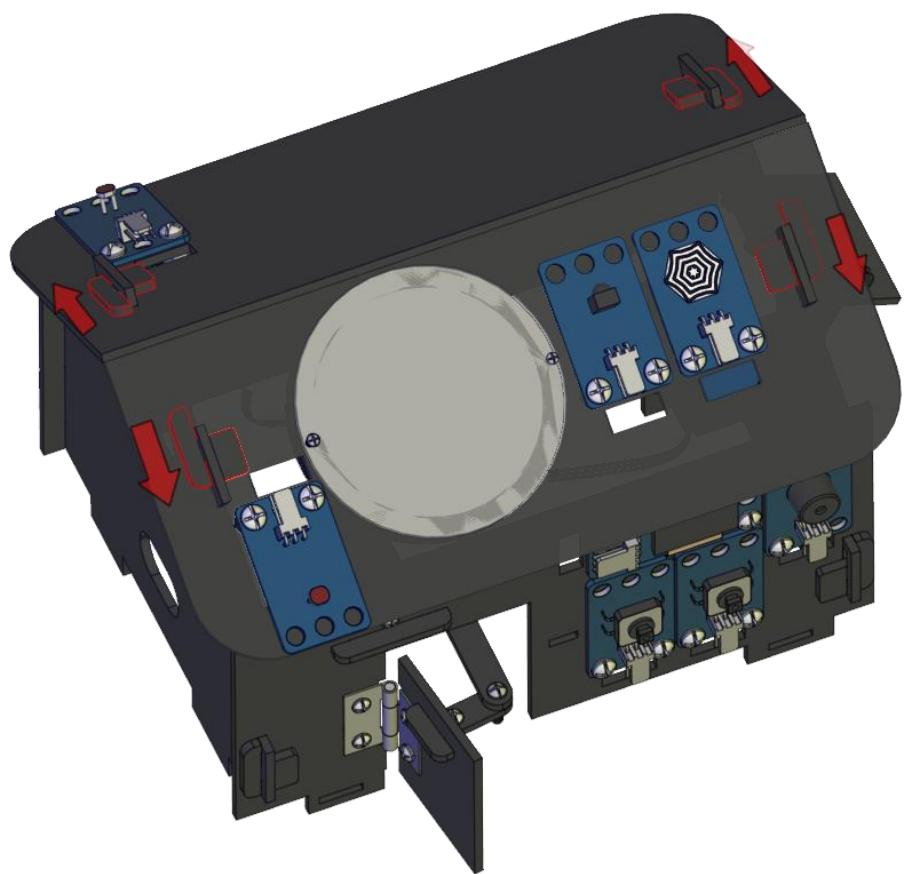
Step 3  
complete



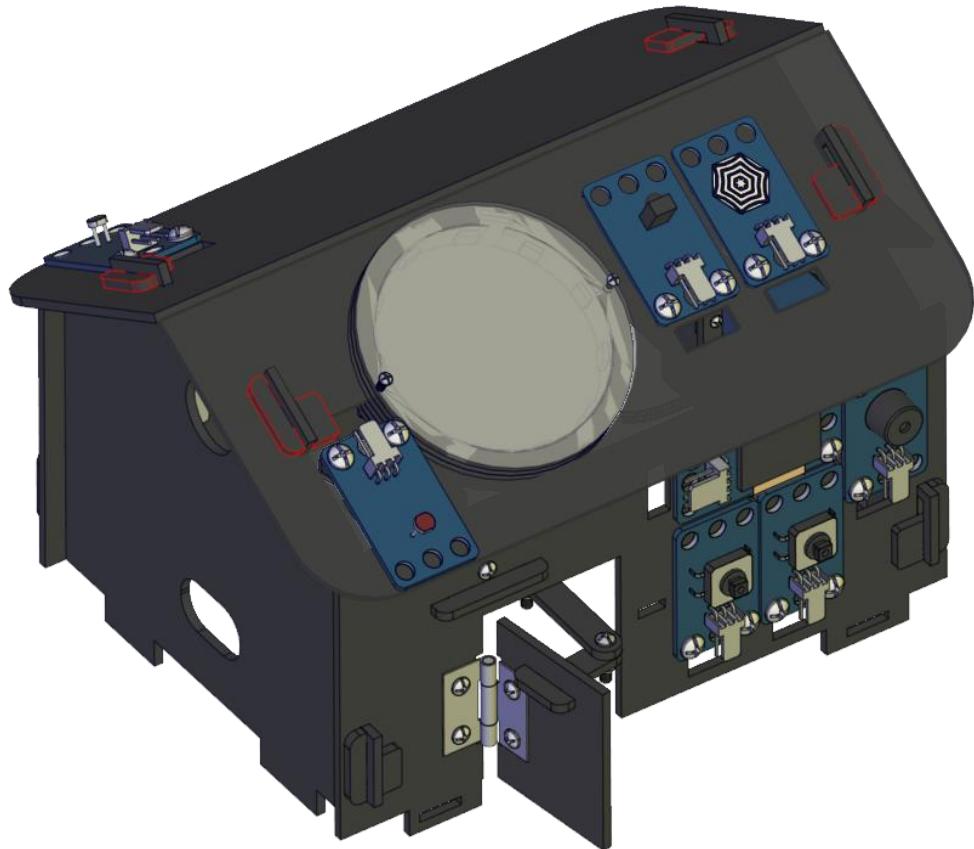
Step 4



Step 5

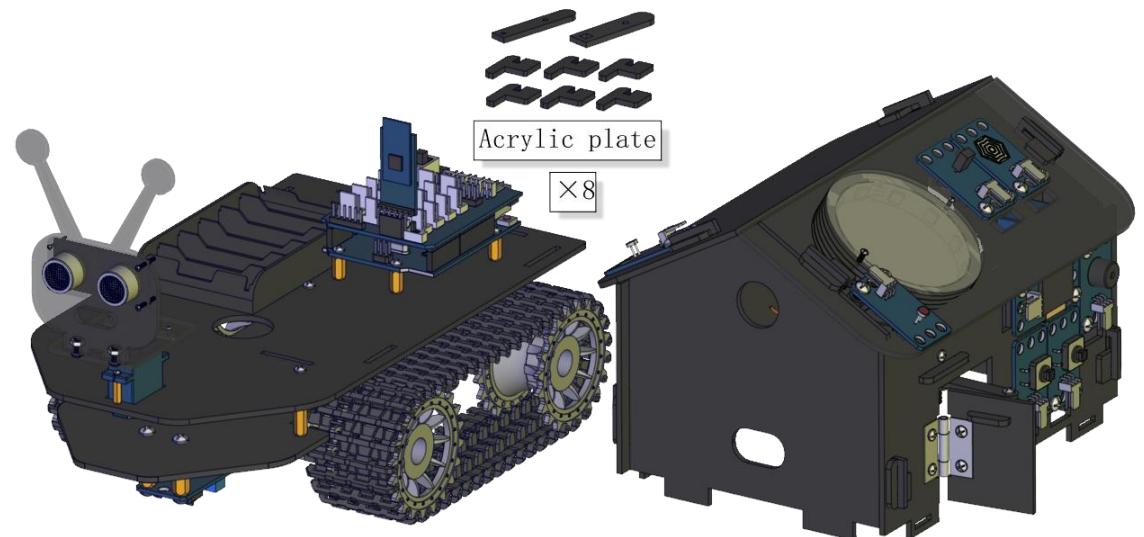


complete

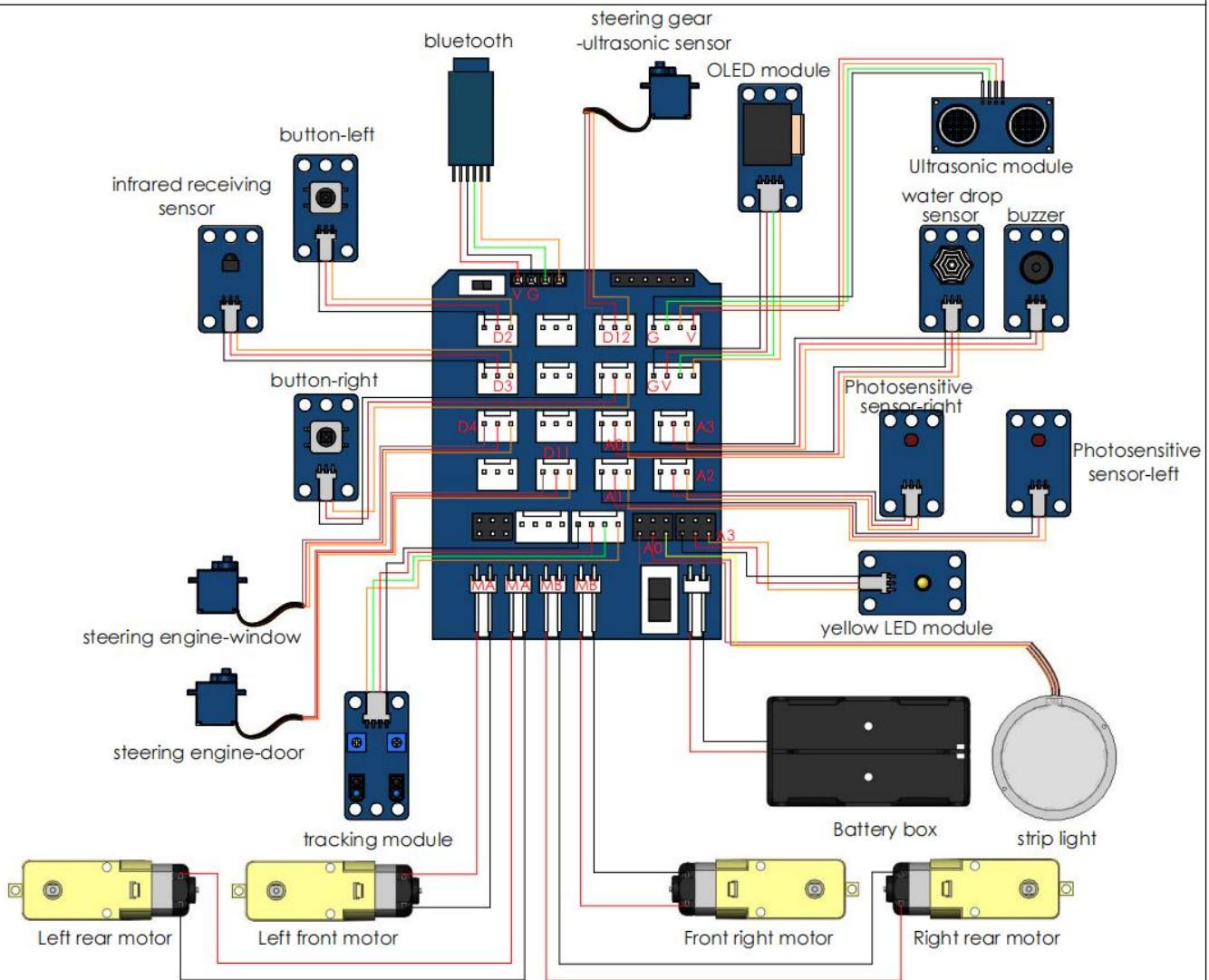


## Installation 30

Parts  
required  
for  
installati  
on



# Now connect all wires



**Note:** The color order of the wiring should be consistent with the figure. In particular, the strip light and the three steering gear lines are not anti-reverse connection.



Wiring diagram.pdf

## Wiring sequence

### 1. Motor wiring

The two motors on the left are connected to two MA, regardless of order;

The two motors on the right are connected to two MB, regardless of order;

### 2. Tracking module wiring (D9,D10)

3. Steering gear wiring at the head (D12)

Note the color order of the wiring, black --G, red --V, orange -- D12

4. Battery box wiring

5. Yellow LED (A3)

Note that it is connected to the A3 black 3P terminal near the power switch

6. Left button module (D2)

7. Right button module (D13)

8. Buzzer module (A3)

Note:Connect to A3 of the white terminal

9. OLED display

Note:Connect to the IIC interface without white wire frame. The sequence is SCL SDA V G

10. Steering gear for windows (D4)

Note the color order of the wiring, black --G, red --V, orange -- D4

11. Door steering gear (D11)

Note the color order of the wiring, black --G, red --V, orange -- D11

12. Ultrasonic module

Note:The wire should pass through the hole and connect to the IIC interface with the white wire frame. The sequence is V SCL SDA G

13. Water drop sensor (A0)

Open the window first, it will be better to connect to the A0 port

14. Infrared receiving module (D3)

15. Strip light (A0)

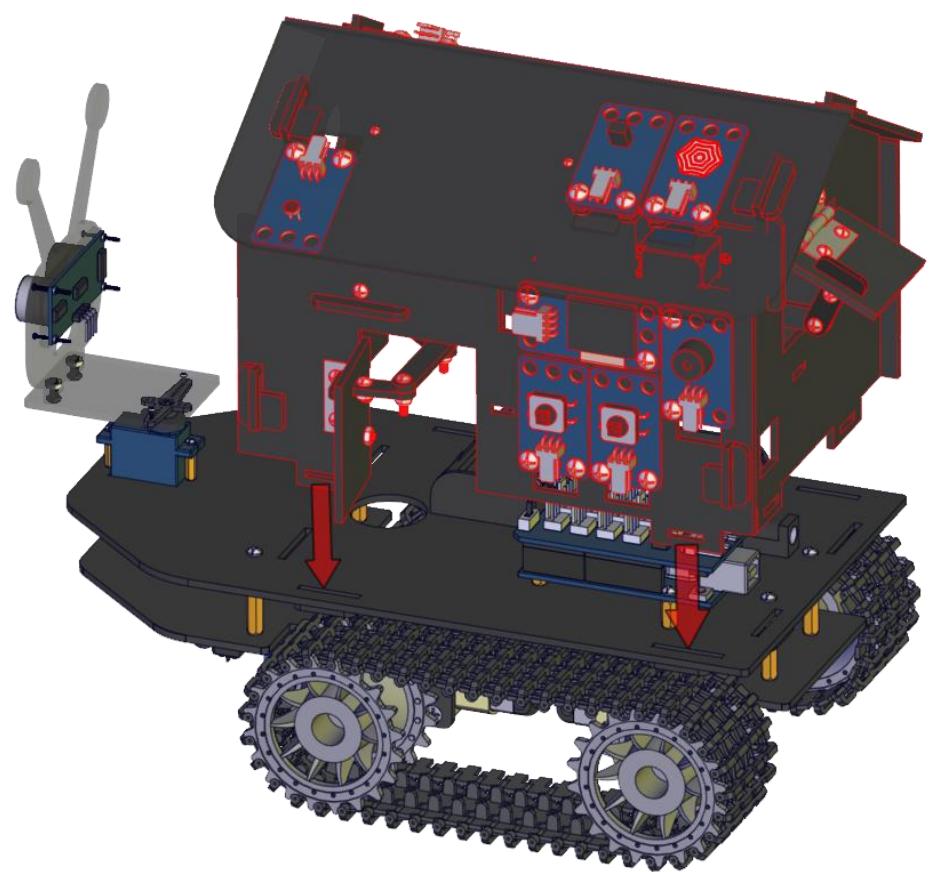
Note:Connect it to the A0 black terminal near the power switch.

the color order of the wiring, black --G, red --V, orange -- A0

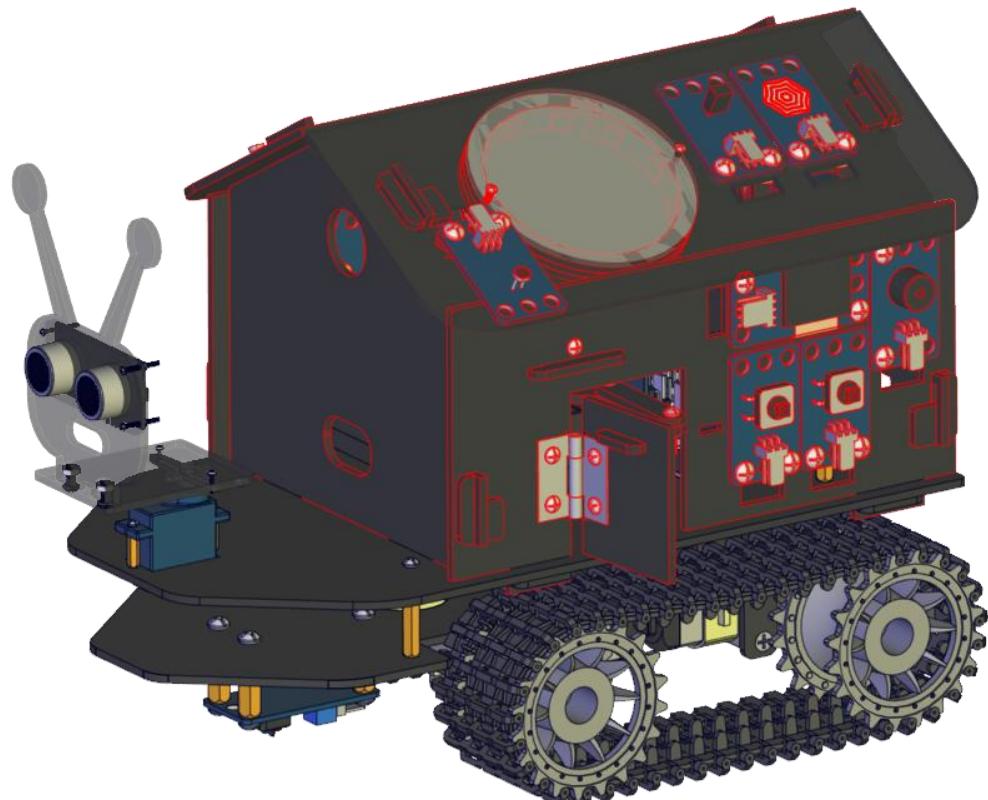
16. Photosensitive sensor on the left (A1)

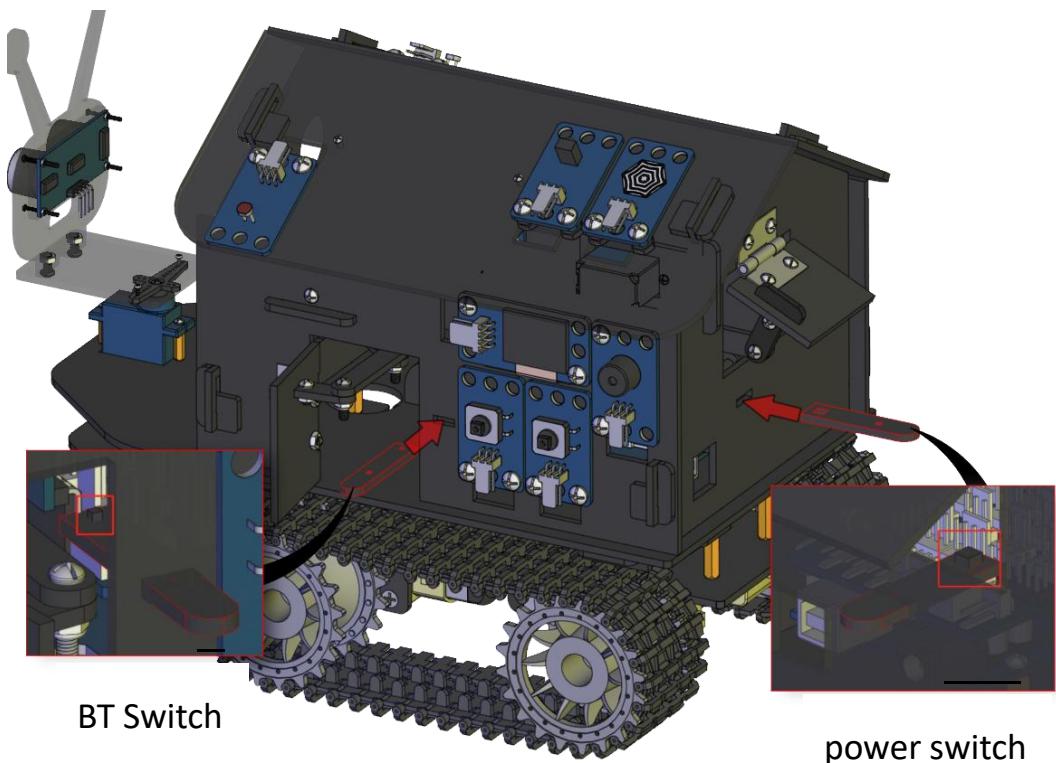
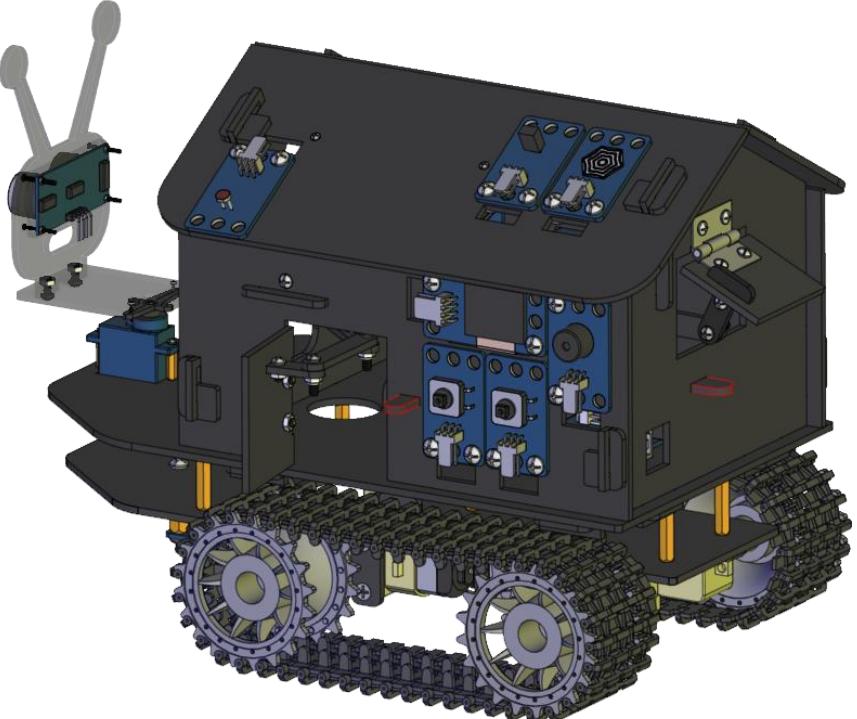
17. Right photosensitive sensor (A2)

Step 1

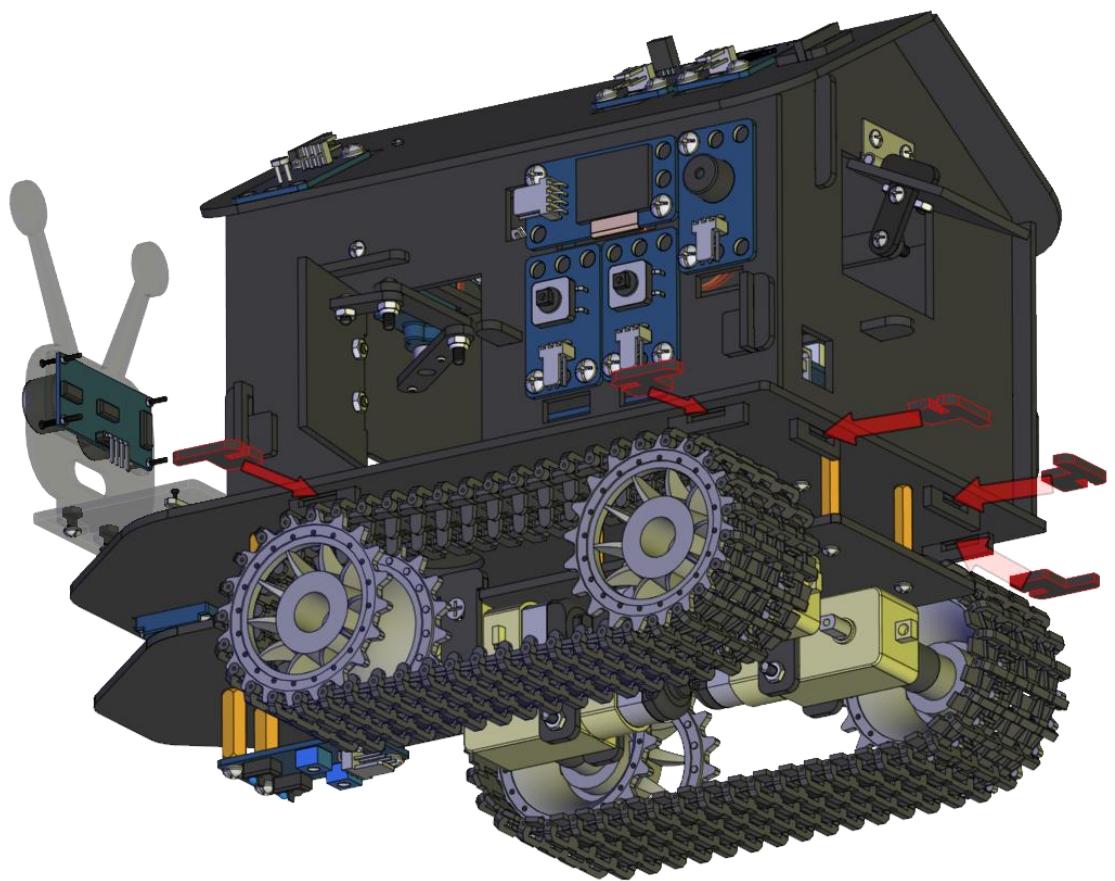


Step 1  
complete

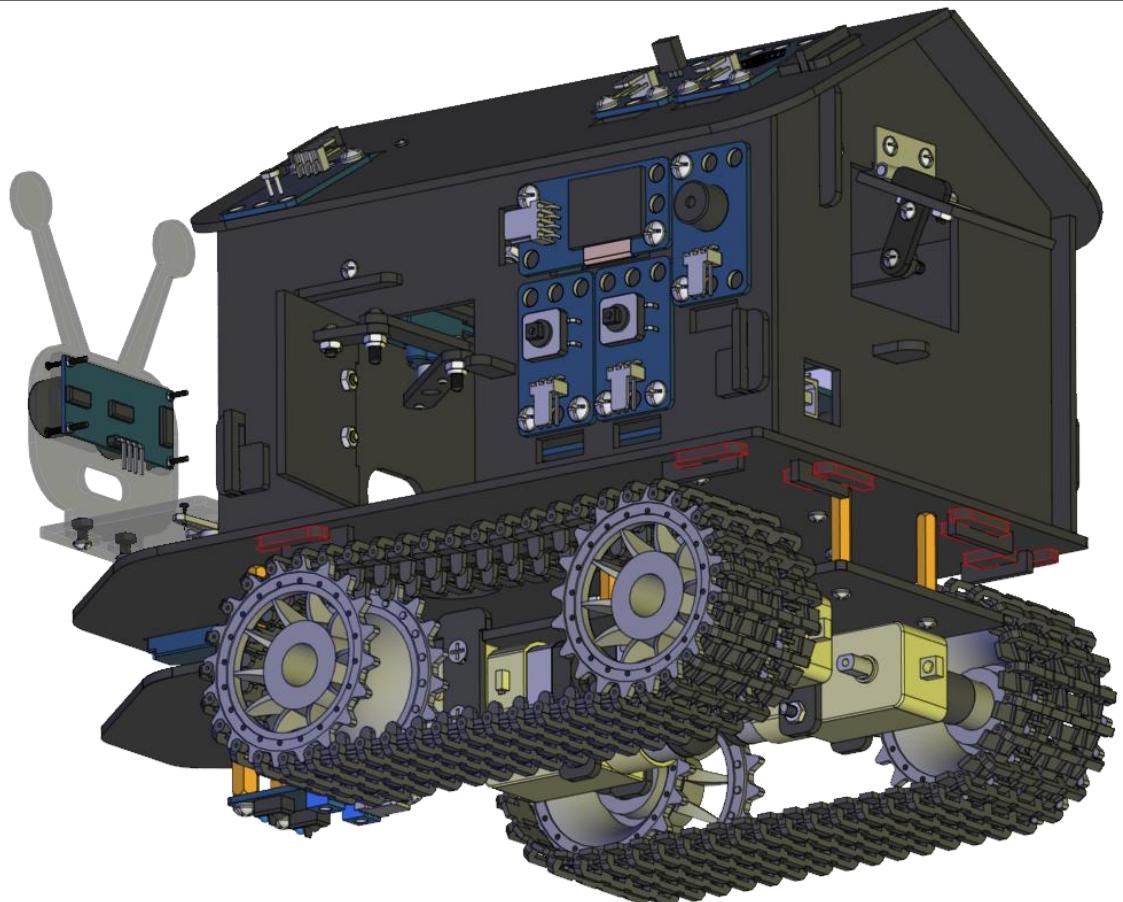


<p>Step 2          (The          switch          needs to          be buckled          in the          correspon          ding hole          position)</p>	 <p>BT Switch</p> <p>power switch</p>
<p>Step 2          complete</p>	

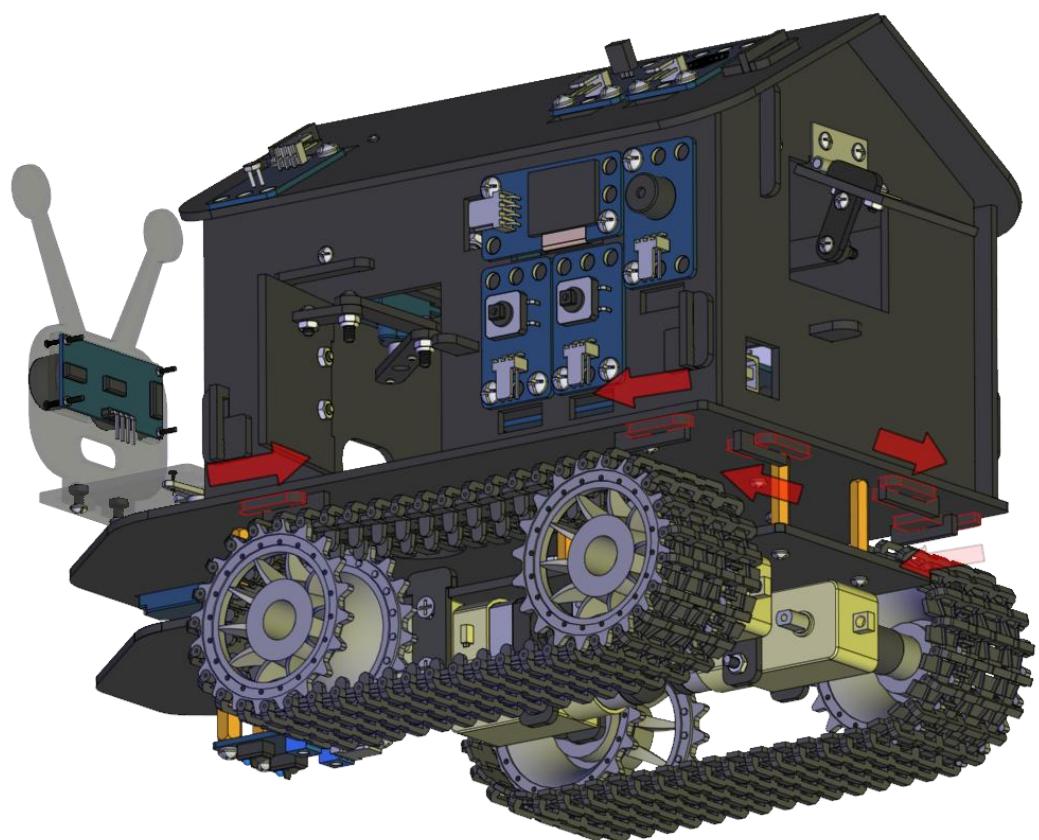
Step 3



Step 3  
complete



Step 4



complete



